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TO CALLERS AND TELEPHONERS

Until further notice our office hours are:—
Mondays to Fridays - 9.30 *a.m. till* 5.0 *p.m.*
The office will be closed on Saturdays.

Lord Stamp and the Reichsbahn

GENERAL DAWES, the well-known American whose name is associated with the Reparation Commission's 1924 Committee on German Currency & Finance, has said that the Dawes Plan should have been called the Stamp Plan. As this committee initiated the operation by a company of the State railways in Germany, Lord Stamp, whose death through enemy action last week is recorded elsewhere in this issue, may be regarded as the Father of the Reichsbahn. On April 1, 1920, under the provisions of the Weimar Constitution, the various State-owned railways in Germany were amalgamated into a single system, operated by the Central Government. In November, 1923, the combined system was reorganised into a commercially-managed unit, independent of the Government budget, as one of the measures necessary for the stabilisation of the German currency. The status of the new undertaking was confirmed on February 12, 1924. This organisation had an effective life of but a few months, for on October 11, 1924, under the Dawes Plan, the German State Railway Company was formed under a scheme which provided that the railways should be worked by the company as a commercial undertaking, in the interests of efficiency, and that a substantial proportion of Germany's reparation payments should be found from the net revenue of the Reichsbahn, the capital charges of which had been wiped out by the inflation, and from the transport tax on the traffic of the German railways. In 1930, when the Dawes Plan came to an end, certain alterations were made under the Young Plan, and the railways practically became State railways though still administered with a separate budget and financial autonomy by a board nominated by the German Government. Reparation payments were suspended in 1932. On February 12, 1937, the undertaking was once more placed under the exclusive authority of the German Reich and formed part of the Ministry of Transport. Hitler thus cancelled the right of the Deutsche Reichsbahn Gesellschaft to operate the State railways until December 31, 1964.

* * * *

Thos. Cook & Son Centenary

The recent issue of the balance sheet of Thos. Cook & Son (Bankers) Ltd. recalls to mind that this private banking company had its origin in the firm of Thos. Cook & Son which was established in 1841, and which, therefore, celebrates its centenary this year. In 1924 the joint activities of Thos. Cook & Son were split and two limited companies were formed. Thos. Cook & Son Ltd. took over the widespread travel organisation business, and Thos. Cook & Son (Bankers) Ltd. has since conducted the banking activities of the parent concern. The balance sheet of the banking concern covers the financial year to October 31, 1940, and continues to exhibit a very sound position, which, having regard to the exceptional circumstances throughout the world, is especially gratifying and fully justifies the high reputation of this institution with world wide interests. A characteristic of the bank has always been its high liquidity, and this is again an outstanding feature. With a paid up capital of £125,000, the company shows a reserve fund equal to that figure and no doubt internal reserves are also substantial. Current, deposit, and other accounts total £2,813,811, against £3,451,661 in the previous year; and of the investments, amounting to £447,755, which appear below market value, £381,766 are in British Government securities, and £25,920 in Indian and Dominion Government stocks. The liabilities for current, deposit, and other accounts are covered by cash and short loans to approximately 77 per cent. The whole of the capital of the French subsidiary, Thos. Cook & Son Bankers (France) Ltd., is held by the company and is included in the balance sheet at below cost.

* * * *

Canadian National Railways

Results of the Canadian National Railways Company for the year 1940 show a gratifying increase over those for 1939, and prospects for the year 1941 are particularly favourable. No traffic details are given in the official summary, which mentions that net operating revenues for the year 1940 show

an improvement of $24,152,993, or 116 per cent. over the corresponding figure for 1939, and that the operating ratio of 81·82 per cent. is the lowest in the history of the system. The amount available for interest is raised from $10,635,023 to $33,474,000, and it is hoped that in 1941 the company will earn its fixed charges. In 1939 operating revenue was $203,820,186 and was the highest of any year since 1930; operating expenses amounted to $182,965,768, or 89·77 per cent. of operating revenue—the best ratio since 1929—and net operating revenue totalled $20,854,418. 1939 requirements for interest on funded debt held by the public were $49,814,377, and interest payments to the Government on temporary loans for capital purposes were $916,165. Many of the company's officers are now employed in civilian war services, and 1,859 members of the staff enlisted in the Forces during the year under review. Two Canadian National ships are on naval service.

* * * *

Rhodesia Railways

The annual report of the directors of the British South Africa Company contains details of the operation of the Rhodesia Railways, in which the " Chartered " Company is largely interested. Because of delays in the issue of the accounts relating directly to the Rhodesia Railways this information is not otherwise obtainable. The British South Africa Company's proprietary interest in the Rhodesia Railways Limited is represented by its holdings of 1,609,201 shares out of 2,005,767 issued shares of the Rhodesia Railways Trust Limited, which itself holds the whole of the share capital of the Rhodesia Railways Limited, namely 500,000 shares of £1 each. The audited accounts of the Rhodesia Railways Limited for the year ended September 30, 1939, were sent to Rhodesia for presentation to the Railway Commission in February, 1940, but owing to certain matters connected with them being still outstanding they have not yet been approved. In the circumstances the Rhodesia Railways Limited is still unable to issue its accounts or to recommend the payment of a dividend in respect of that year. For the same reasons the Rhodesia Railways Limited is unable to complete its accounts for the year ended September 30, 1940, for submission to the Railway Commission, but reports that, subject to any adjustment which may become necessary as the result of the examination by the Railway Commission of its accounts for the two years ended September 30, 1940, operating results for that year as compared with those of the two previous years were as follow:—

	1940 £	1939 £	1938 £
Gross revenue	4,970,098	4,481,176	5,030,636
Working expenditure, including provision for depreciation	3,049,277	3,094,333	3,110,363
Net earnings	1,920,821	1,386,843	1,920,273

The approximate gross receipts of the system, including the Beira and Shabani Railways, for the three months ended December 31, 1940, were £1,669,749, an increase of £283,889 as compared with the corresponding period of 1939.

* * * *

The U.S.A. Gauge Problem

It is perhaps inadequately realised that the United States has faced and triumphed over gauge problems which in the aggregate were probably of greater magnitude than those of any other single country in the world. In its January issue, the *Mutual Magazine* (of Pennsylvania Railroad employees) recalls that in 1871 railways were operating in the United States on nineteen different gauges, ranging from 3 ft. to 6 ft., and that from 1867 to 1871 it was possible to travel the entire distance of over 1,200 miles from New York to St. Louis, by what is now the Erie route as far as Dayton, Ohio, and the Baltimore & Ohio thence to St. Louis, over 6-ft. gauge lines; considerable sections of the present Delaware, Lackawanna & Western and the Delaware & Hudson Railways were similarly of 6-ft. gauge. The first impetus to unification of gauge came with the conversion in 1868 of the then Pacific Railroad of Missouri (now the Missouri Pacific) from 5 ft. 6 in. to 4 ft. 8½ in., and three years later of the Ohio & Mississippi from 6 ft. to 4 ft. 8½ in., and so rapidly did conversion proceed in other directions that by 1887 practically every important main-line railway in the United States was operating on standard-gauge tracks. At the beginning of 1939 (the last detailed figures available), out of 236,842 miles of railway in operation in the U.S.A., 235,386 miles, or 99·4 per cent., were of 4 ft. 8½ in. gauge, the remaining 1,456 miles being of narrow gauges, chiefly 3 ft. Some 113 miles of railway tracks were equipped with three rails to accommodate both narrow and standard equipment. The narrowest gauge is 2 ft. on the 8-mile Monson Railroad and the 16-mile Bridgton & Harrison Railway, both in Maine.

* * * *

Streamlining and Speed

The purpose of enclosing the boiler and other parts of a locomotive in a streamlined casing is generally understood to be that of reducing the effects of wind resistance at high speeds, and there are arguments both in favour of and against the practice. It is, therefore, somewhat astonishing to find engines being streamlined that are destined never to exceed the most moderate speeds in passenger service. There have been instances of this in designs for overseas railways where the average speed on the level is less than 50 m.p.h. and the maximum, in any circumstances, 60 m.p.h. In such conditions of traffic working, streamlining of the locomotive has little or no significance, in so far as its primary purpose is concerned, although it may have some value in creating public interest, especially where competition with other routes, including road services, is keen. Where engines with large high-pitched boilers and squat mountings are built, some with streamlining and others without, opinion usually favours those without where appearance alone is in question; but where the streamlined casings serve to hide a low pitched boiler with " lanky " chimney and other mountings this opinion is quite likely to be reversed.

* * * *

The New York "L" Company

The Manhattan Railway Company, which once operated all the elevated rapid transit railways in the boroughs of Manhattan and Bronx, New York, voted for the dissolution of the company at the annual meeting of stockholders held recently. The Manhattan Railway Company originally leased elevated railways from the Metropolitan Elevated Railway and the New York Elevated Railroad, but it subsequently acquired complete ownership and operated these properties until April 1, 1903, when they were leased to the Interborough Rapid Transit Company. Since that time the " L "—as the elevated railways are commonly called in New York—has been worked as part of the great Interborough system, but the Manhattan Railway Company retained the ownership and in the recent negotiations with the New York municipality played an important part. Just before the abandonment of the Sixth Avenue Elevated (on December 4, 1939), the Manhattan Railway owned 41 route miles of line, representing 139 track miles. The system was formerly worked by light Forney type steam locomotives until steam gave place to electrification in 1902.

* * * *

Evacuees and Season Tickets

It may not have been foreseen that the voluntary evacuation of numbers of town-dwellers to country districts would cause so large an increase in railway season tickets. This is particularly so around London, and the distances affected range from 20 or 30 to as much as 50 or 60 miles, and even more. A natural consequence is the overcrowding of certain popular trains which were formerly of relatively light loading, and there have been many instances of complaints. " Old-timers " who for years have been accustomed to the same corner seat in the same compartment on their daily journeys now have to compete for a seat in any part of the train with " outsiders." Perhaps the main problem is that provided by holders of third class tickets travelling first class without troubling to find out whether there is room for them in the thirds. Short staffed though they be, the railway companies are doing everything possible to ensure that holders of first class tickets, ordinary and season, shall have a prior call on the available seating to which they are entitled, but despite their efforts they are receiving an increasing number of complaints.

Relay Interlocking Progress in Sweden

In the November, 1940, issue of the *Nordisk Järnbanetidskrift*, the re-appearance of which we recorded in our issue for March 14, 1941 (page 288), Mr. T. Hård, Signal Engineer, Swedish State Railways, gives details of the various point machine control circuits used by his administration and describes their advantages. As may be expected, some installations have the long-established indication locking system, while others have the Central European arrangement; the latter has only one indicating magnet—without, however, any actual indication lock—energised to prove correspondence between the frame handle and the lineside function it controls, with latched changeover switch, freed by the magnet armature, alternately connecting the feed to the operating and indicating voltages during each movement. The earliest power signal boxes in Sweden in 1910 had this system, long well known on the Continent. In 1927 Sweden began to adopt purely electric locking in power frames and many installations came into use. Push-button and switch control methods developed naturally therefrom and are being increasingly seen, chiefly at small stations, where power operation is more frequently used than in Great Britain, both on the State and private lines. A general illustrated account of Swedish signalling appeared in our issue for November 1, 1940, page 463.

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Steam Versus the Others

Among the multitude of loose statements uttered in suburban railway trains and printed in newspapers and books, that which prophesies the disappearance of steam locomotive traction within the next so-many years is one of the hardest-wearing. It has been in constant use ever since the first electrification of a railway, and perhaps reached its zenith in the last decade with the extraordinary growth of diesel traction. Nevertheless, the steam locomotive continues to hold its own, and with the important detail improvements developed in the past 15 years or so, and which have almost doubled its overall thermal efficiency and vastly increased its availability, there is little likelihood of its being replaced for general purposes for many years to come by either electric or diesel traction. For special purposes and in certain circumstances, there is, however, no doubt that other forms of traction may be superior, although it is a curious and interesting commentary that when the newer sources of power are used on railways, it has often happened that the steam locomotive has had to be called upon to render emergency service.

* * * *

Smiling at the Railfan

Signs are not wanting that American railways are fully alive to the potential value of the railway fan. " The railfan," says a writer in the *Boston & Maine Employees' Magazine*, " is not a necessary evil; he is an asset—a publicity help and potential customer that a million dollars' worth of fancy advertising could not stimulate so intensely. From this type of enthusiast the railroad realises a source of revenue, small in gross, but huge when one considers that this person will travel by rail, ship by rail, and send his family by rail whenever possible." The writer remarks on the surprise evinced by some train conductors when they see a passenger get off at some intermediate stop, only to " hop right on " to a train in the opposite direction which will return him to his starting point. " These people are not morons," he comments ; " they are enthralled by the mechanics of a great industry." It is altogether desirable from the railway point of view that the " amateur railroader " should become interested in railway economics and the complex questions of competition, as he can help materially in assisting the railways against unfair rivalry. " Every bit of this interest represents customer appeal," the writer concludes. " Railroad employees can do their bit with helpful, courteous treatment of these fans. Answer their questions and be rewarded with their goodwill. Next time a railfan cocks his camera at you as you're oiling around, or peers goggle-eyed through the grill when you're slinging it with the ' bug,' *smile*. It's good business."

Lord Stamp

THE regrettable death through enemy action during the air raid on London on Wednesday night of last week of Lord Stamp, his wife, and his eldest son, provides one of the anomalies of modern warfare, for Lord Stamp played no mean part in furthering Anglo-German relationships in both the financial and transport spheres. It will be recalled that at the impressive railway centenary celebrations held at Nuremberg on December 7 and 8, 1935, Lord Stamp and Dr. Dorpmüller laid wreaths on the memorial in the Nuremberg Transport Museum in honour of the railwaymen of all countries who fell in the war of 1914-19. In September, 1938, Lord and Lady Stamp were among the honoured British visitors to Nuremberg for the German National Socialist Party Congress, and a week or two later Dr. Dorpmüller was among the principal guests at the London & Birmingham Railway centenary banquet in London over which Lord Stamp presided. Before his association with railway circles Stamp had been British representative on the Reparation Commission's (Dawes) Committee on Germany Currency & Finance in 1924, and upon the (Young) Experts' Committee in 1929. Both these committees attempted to settle the question of German reparations, and in his capacity as British representative Stamp was handling problems of the highest importance, not only to Anglo-German relationships, but also to the economic history of England and Europe. Under the Dawes Plan, the German State Railway Company was formed to operate all the State railways in Germany and to pay a substantial proportion of the reparations payments out of the net revenue.* General Dawes, the distinguished American who gave his name to the first of these schemes, has been quoted as saying that the Dawes Plan ought to have been called the Stamp Plan, which suggests the greatness of Lord Stamp's contribution to the scheme. By many the Dawes Plan was regarded as far more workable than the Young Plan of five years later. The former included an ingenious " transfer clause " which provided that the payment of the reparations annuities to the Allied creditors was to cease if they threatened the stability of the German currency, and by means of a " gold clause " it was arranged that the amount Germany had to pay should be reduced in the event of a heavy fall in prices. Both these provisions were abandoned by the Young Plan in order to secure for the creditors more certainty concerning the amounts that they might be expected to receive—an objective that was completely defeated by the breakdown of the Young Plan in 1931.

These activities, which might have been the crowning achievement of another man's career, were but incidents in the very diverse and widespread activities of an unique and irreplaceable figure. In succession he was a civil servant, a company director, a university lecturer, and the head of one of the world's greatest railway systems, and in each of these capacities Stamp won outstanding success. *The Times* in a leader published on Friday last said that his career " was a practical protest against the increasing specialisation which many have come to regard as one of the banes of the modern age," and yet it would not be unfair to regard Stamp's career as the apotheosis of specialisation in the financial and statistical spheres, and the application of this in many directions. During the last war the administration of Excess Profits Duty brought him into intimate contact with large industrial concerns, and he severed his connection with the Civil Service in March, 1919, to become Secretary to and a Director of Nobel Industries Limited, and thus entered upon the phase of his career which might be termed " commercial management." The explosives trades of this country were then allied with one another in the form of trade associations, and these were used by Stamp as the basis of one of the earliest of the enormous commercial and industrial groups formed shortly after the last war in an attempt to weather the financial storms of the reconstruction period. Stamp had considerable admiration for the American business organisation as exemplified by the great Du Pont-de Nemours chemical group, and this was not without its influence on the organisation of Imperial Chemical Industries

* This subject is mentioned in greater detail in an editorial note at page 465

when it was formed in December, 1926. Stamp was on the I.C.I. board in 1927-28. A member of our editorial staff who was associated in a professional capacity with the beginnings of this movement more than two decades ago has vivid recollections of the statistical manipulative genius exhibited by Stamp in the complex negotiations.

It was with this background—the training of a bureaucrat and the commercial experience of an economist—that Stamp was invited to enter the British transport sphere. For long it has been an open secret that Sir Guy Granet, then Chairman of the L.M.S.R., was responsible for the introduction, but it is only now that Stamp has passed from our midst that Sir Guy has revealed this in public print in his appreciation to *The Times*. The L.M.S.R. undertaking resulting from the 1923 amalgamations became not only the largest commercial undertaking in the British Empire but also one of the greatest in the world. The first General Manager was Sir Arthur Watson who was succeeded in 1924 by the Rt. Hon. H. G. Burgess. This appointment, however, was recognised as being temporary, and in May, 1925, the directors of the L.M.S.R. announced that in view of the experience of amalgamation they had been considering the organisation of the executive control of the company and had decided to create the post of " President of the Executive." Lord (then Sir Josiah) Stamp was appointed to this post and took up his duties in January, 1926. In October of that year the abolition of the position of General Manager was announced, in view of the impending retirement of Mr. Burgess at the end of March, 1927, and it was stated that the executive control of the company's business would be vested in the President of the Executive together, in the first instance, with four Vice-Presidents who would form an Executive Committee, assisted by the Secretary and the Chief Legal Adviser. There can be no doubt, in the light of events, that as President of the Executive and as Chairman of the company—an appointment he assumed the year after he joined the undertaking—Lord Stamp brought the London Midland & Scottish Railway Company into great prominence. The departure from the usual organisation of railway executive control has undoubtedly proved successful and has adequately disproved the forebodings which were felt in some quarters at the time at what was, by common accord, a bold move. It has never become known with whom originated the idea of the control of a great British railway by an executive committee, and it has therefore been impossible to accord the credit which is due for this inspiration. The idea was probably developed by Stamp himself, as the result of his commercial experience, when Sir Guy Granet invited him to manage the L.M.S.R. in his own way. At the same time it is patent that the board of directors displayed great acumen in the adoption of the idea, and tribute should also be paid to Sir Guy Granet who first found the right man and then relinquished the chairmanship in favour of Lord Stamp, a position which had been paralleled in 1912 on the North British Railway board when the Duke of Buccleuch (then Earl of Dalkeith) resigned the chairmanship in favour of Mr. William Whitelaw.

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Strange History of a Danish Railway

THE project for a new line from north to south of the Danish island of Zealand, by which direct connection would be given between Elsinore, the terminal of the train ferry to Sweden, and Gedser, whence the Baltic train ferry plies to Warnemünde in North Germany, so avoiding Copenhagen with its congested railway traffic, was almost consummated when about four years ago it was decided, owing to the lack of local traffic and the consequent deficit on working, to close most of the newly-constructed line and abandon construction on the remaining section. As the article on page 472 shows, the only part of the Mid-Zealand railway which remains in use connects Ringsted and Næstved and now forms a section of the main line used by through trains to Germany between Copenhagen and Gedser. It may be doubted whether any similar railway has ever had so short a life as the 35-mile Ringsted—Frederikssund section, now derelict, which was worked for only eight years, and which included a 745-ft. bridge, with an opening span, across the Roskildefjord at the latter place. The removal of the superstructure of the Frederikssund bridge to act as that for the new bridge required to carry standard loads on the main line of the Danish State Railways across the Limfjord, north of Aalborg in Jutland, is also probably unique in railway history. Other peculiarities of the Mid-Zealand railway included temporary signalling at the important junction stations of Næstved, Ringsted, and Hvalsø, pending the result of much argument as to whether one central signal box or several separate boxes should be used. Meantime the old signalling arrangements were retained with modifications for the new lines, but necessitating, at Næstved and Hvalsø, the stopping of all main-line trains, and their being accompanied by a pilotman through the station. At Ringsted, the Copenhagen—Gedser trains had to be treated similarly. The argument appears never to have been finally settled, for a single central box was eventually adopted for Ringsted, and several smaller ones were distributed throughout the station limits at Næstved. The latter is, of course, in accordance with the old Central European standards, but it may be doubted whether the complications of working involved by this arrangement will persist for very much longer.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

War Transport Council

Finings Farm, Lane End,
High Wycombe, April 17

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In your admirable article on the above there is a significant paragraph: " The Railway Executive Committee as constituted during the last war is considered by some to have worked better than the present body."

If in the place of " some " you had written " all railway officers connected with the last war " I think you would have been perfectly correct. This is in no way a reflection on the existing committee.

On the last occasion the Railway Executive Committee was appointed to " manage the railways." They were not, shall I say, interfered with. The President of the Board of Trade and the Permanent Secretary (Sir W. F. Marwood) were possibly the only two persons who ever had any contact with the Railway Executive Committee, which was left to " manage the railways."

Today, under the existing organisation, the members of the present committee are not the free agents as were their predecessors. There is the Minister of Transport himself (third since the outbreak of war); the Permanent Secretary; four or five other " experts " in railway administration all exercising Government authority; and further a Railway Control Officer, recently appointed a member of the Executive Committee.

As the committee comprises three general managers, a chairman of a railway company or board, and a vice-president of another large railway, together with an ex general manager as chairman, one may be excused for asking, as I do—an ex railway officer—what is the necessity for a Railway Control Officer? What precisely are his functions and responsibilities?

Yours faithfully,
FRANK R. POTTER

Traffic Allocation in War

April 16

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—As soon as it was seen that the enemy was not to succeed in putting the British railways out of action why, oh why, did the companies not re-introduce the allocation of traffic system which, it was agreed by those best able to judge, was one of the finest pieces of legislation brought into operation on the railways during the last war? Is it because

those now in authority have no knowledge of the benefits which that system provided, and how it solved many difficulties?

Here is an arrangement to hand which makes available a large supply of wagons and sheets to meet the present shortage; which gives more direct and, therefore, less transhipping and, as a natural sequence, fewer errors in loading; fills wagons nearer to their capacity; eliminates a vast amount of shunting at station yards, marshalling yards, and junctions; enables long distance through trains to be made up; and, in these days of inexperienced loading staffs, calls upon such staffs to make themselves acquainted with only the portion of the country to which they have to load traffic.

Yours faithfully,
" PUZZLED "

Lord Stamp and Railway Stockholders

Elsenham, Essex
April 18

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—The death of Lord Stamp in tragic though honourable circumstances is a loss to stockholders in the railways that time will not make good. As was to be expected, the press in recording this lamentable occurrence lays stress principally upon his great achievements and financial acumen. But to those of us who knew him only in connection with the railways and who were privileged to witness his work upon the L.M.S.R., the outstanding characteristics were the extraordinary courage and dexterity with which he introduced his measures and averted or countered inevitable opposition. His success was certainly prodigious. Within the short space of approximately eleven years, he built up from the debris of the L.N.W., the Midland, the Caledonian, and countless other railways an organisation second to none on this continent or any other. It is one of the minor tragedies of the war that it occurred at the precise moment at which this fact would have become obvious.

There never was anyone less hidebound in his desire to derive information or to secure ideas. Proposals which others would dismiss with a superior smile he would absorb and digest, until, in so far as they were sound, they became, as it were, a part of his own mind. Thus his attitude to a problem was never complicated by tradition or hampered by precedent.

It may be said—it frequently has been—that his activities were far too diffuse and that his achievements represented in no small measure the ingenuity and the knowledge of countless unknown individuals. No doubt there was some truth in all this. With Lord Stamp activity had almost become a disease, and he absorbed so many ideas from so many different sources that he himself could never have stated where they originated. But when all this had been said, he was one of the greatest of the assets remaining to the British railways, and with his death the railway stockholder sacrifices once again to the unending demands of this war.

I am,
Yours very truly,
ASHLEY BROWN

A Plan for Transport in Peace

26, Throgmorton Street, London, E.C.2
April 22

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I congratulate you on the space which you devoted in your number of April 18 to the wider aspects of road and rail transport policy. I should like, however, to correct two minor slips in your references on p. 447 to my recent paper before the Institute of Transport. In the third paragraph headed Rate Structure, doubtless your readers will have spotted the typist's error under which the word " important " has been substituted for " impossible "—" It is impossible for a healthy national transport system to operate simultaneously the value and cost rate structures." On the top of the second column, after the words " The supervision of a radius limitation might be difficult " there follows in your commentary the expression " if ancillary transport is not restricted as to its radius." Reference to my paper will show that these last words are taken from a different sentence where they are used to make quite a different point.

In order to encourage others to join in, I beg to contribute the following observations. I quite agree with Mr. Mills in his review of the road and rail problem as expressed in your summary, and in particular with his conclusion that the fundamental problem will be the rates charged for the carriage of goods. I have, however, grave doubts of the possibility of Statutory enforcement of minimum rates, and suggest that this will in any case be impossible without a previous consolidation of road transport undertakings. I have referred in my paper to the disadvantages of any arbitrary division of traffic based on distance. In fact, I cannot see any stable system for division of function which is not automatic in its action. In a letter published in *Motor Transport* dated February 1, I pointed out some snags to the differential based on the service given, not the least being that a bad and costly service would be entitled to charge a lower rate than a good and cheap one: This would add to the total cost of transport to the community—a situation which, viewed nationally, we should desire to avoid.

As to your own suggestion for re-introducing toll gates at frequent intervals, I am chiefly concerned with whether this might be a practicable method of collecting from road transport the toll which is an essential part of the road and rail scheme I have suggested. Your proposal roughly takes account of the distance by the close spacing which would be involved, and it is claimed that the toll can differentiate between one class of traffic and another, and in that case could presumably be based on the tonnage carried. Your proposals envisage the tolls being used for the upkeep of the roads only, but the tolls so collected might be paid, together with similar railway contributions, into the fixed charges fund for road and rail combined, and thus fit in with the essential basis of my proposal, viz. that the traffic would pass by the route over which the out of pocket cost of working is the least. The nature of the highway authority is not material to my scheme.

I cannot help feeling, however, that to go back to toll gates would be as unthinkable as a return to muzzle loaders, and that the hindrance to transport would counteract the advantages resulting from millions of pounds worth of road improvements. The delays in verifying the contents of vehicles at each toll gate and the possibility of evasion, whether by false declarations or by by-passing the main roads, as in the old days, would, I feel, render the collection of toll on an equitable basis extremely doubtful in practice.

The modern version of the toll gate is registration duty and the petrol tax, which were originally designed to cover equitably the wear and tear and user of the road—both difficult to assess, and the former, I imagine, now out of date. In order to adapt this machinery to the development I have envisaged of a ton-mile-category toll, it will be necessary to move forward and not backward. For this step forward we have already to hand the vehicle documents kept by road users. It may be expected that these documents will become more reliable with the realisation that a road transport industry without published statistics is still in the primitive stages.

The centralisation of filling stations, whether at toll gates or elsewhere, and in particular your suggestion to make filling stations a monopoly of the road authority, would greatly facilitate the checking of petrol issues, should these form part of the machinery of toll collection under my scheme. A considerable degree of centralisation of filling stations has been brought about by the necessities of war, so that your proposal, if decided on, could be easier carried out now than at the time it was made, and in any case with less difficulty than the grouping of small hauliers. Apart from the obvious necessity of avoiding inconvenience to road users, some big questions would arise, such as the economic advan-

tages or otherwise to the community of the small private filling station. If we are heading for a State transport system, a petrol filling station monopoly might well be a logical counterpart. Apart from this, it would be interesting if the pros and cons of your suggestion could be brought out in contributions from your readers. Objective discussion of different aspects of the road and rail problem is to be encouraged, in order to draw out the latent ideas which must exist in many quarters. To this end provocative articles such as yours of April 18 deserve our gratitude.

Yours faithfully,

H. O. MANCE

THE SCRAP HEAP

NAZI PROPAGANDA

German authorities have recently made public some figures which reveal the importance the Nazi leaders attach to propaganda on the German Home Front. Since the beginning of the war, the Reich Propaganda Department has issued more than 2 million pamphlets, 7 million placards, 60 million periodicals and handbills and more than 67 million leaflets, designed for " the instruction of the people and the formation of their political will." Many public and factory meetings have been held where party leaders have explained different phases of the present situation ; some 30,000 lantern lectures were given and 45,000 film shows a month ; in addition, 60,000 radio sets were distributed to the Army, and 130,000 soldiers attended lantern lectures organised by the Propaganda Ministry.

* * *

Many Southern travellers knew " Captain " Carter, the cheery cripple who sells papers from his hand-propelled chair at the West station, Maidstone, Kent. Owing to the dilapidated condition of his chair, the *Kent Messenger* has made an appeal to the townsfolk for £60 to purchase a new chair for him.—*From the " World's Press News."*

* * *

TCK, TCK

If racehorses are fed on the corn which might be given to the hens which produce the eggs to shampoo the hair which is used to stuff chairs for railway waiting-rooms, there will soon be no chairs in railway waiting-rooms. So why feed racehorses?—*" Beachcomber " in the " Daily Express."*

* * *

The conductor on the first Canadian Pacific Railway train to reach the Pacific coast at Port Moody, B.C., in 1886, and of the first train into Vancouver proper a year later, Mr. P. A. (Pete) Barnhart, died at Kamloops, B.C., on February 26 at the age of 84. Mr. Barnhart retired from the C.P.R. in 1897 and became a hotel owner. In the early part of the century he had a ranch in the district which now bears his name, Barnhart Vale, near Kamloops.

* * *

4,000 RUSSIAN ENGINEWOMEN

In connection with International Women's Day on March 8, the Soviet press gives some details of feminine activities in the U.S.S.R. In 1940 over 5,000,000 women were employed in transport and industry, and no fewer than 4,000 odd were railway locomotive enginewomen. In 1939 there were 164,000 women employed in the engineering industry as fitters and machinists. Over 170,000 women are qualified engineers.

* * *

ITALIAN AND GREEK SHIPPING YEARS AGO

Writing on " The First Great Age of Shipping " Mr. George B. Lissenden in the *P.L.A. Monthly* states :—The Greeks had no native development of the boat, as the country had no navigable rivers, but they had an extensive coast-line, and the comparative poverty of the land drove them in large numbers overseas : to Asia Minor and South Italy, especially.

These conditions soon made them a race of navigators, and through the first millennium B.C. they maintained some rivalry with the Phœnicians and mastered the craft. New conditions from 500 B.C. onward gave them, and presently the Romans, the blue ribbon of the world of navigation until modern times.

The central or Mediterranean Sea began to play the same role in progress as the river had played at the beginning of civilisation.

Cities, with the world's great markets, spread round its coast from Alexandria to Carthage in the south and Italy and Spain in the north. The cargo and passenger boat grew larger and more efficient. Regular lines of them plied between the most distant ports at an average speed of about five knots (in favourable conditions seven or eight knots).

These " round " ships—the heavy broad-beamed cargo ships—were generally owned by merchants or by their own captains, though cities often had their fleets, and in time the Roman Empire built very large ships for bringing corn and marble. A different circumstance gave an equally rapid development of the " long " ship—the comparatively narrow fighting galley, with several banks of oars and a formidable bow for ramming. Piracy developed with trade, and naval war followed, but the special new condition was that the nations now had an immense reservoir of forced or slave labour for their galleys.

There was a limit to the possible length of the rowed galley, owing to the danger of the ship breaking its back in a storm, and the distribution of the rowers in two banks, one above the other—the bireme—began about 700 B.C. It was soon followed by the trireme.

The Greek trireme, of which Athens and other cities had large fleets, was 100 to 140 ft. in length and had a crew of 220 to 230 men, 170 of whom were rowers. They had keels of oak, as it was customary to draw them up on the beach at night, while the rest of the ship might be of pine, fir, cedar, or cypress. The mast—later they had two masts—with a large sail, which could be reefed, was left ashore when they expected action.

The Minister of Transport, who took the above snapshot of Mr. Holland-Martin, compliments the Southern Railway by giving it a prefix. " The work it has been doing since the war," he says, " is so great that I like to think of it as the 'Great' Southern "

OVERSEAS RAILWAY AFFAIRS

(From our special correspondents)

INDIA

Ticketless Travel

In reply to various questions in the Central Legislative Assembly on February 11, Sir Andrew Clow, Member for communications, made the following announcements.

During the year ended March 31, 1940, 3,479,710 passengers were detected travelling without tickets on Class I railways. Of these 1,775,539 paid excess fares and penalties on demand, and legal action was taken against 188,528 under sections of the Railways Act.

Six Branch Lines Closed

Six unremunerative branch lines had been closed and their permanent way and other materials moved towards their final destination (for use elsewhere for war purposes). Being State-owned there was no question of any compensation to a company. Inconvenience to the travelling public could not be avoided, but the lines selected for dismantling had served areas where there were alternative means of communication by road. The British Government would accept full debit for all materials supplied to it from these dismantled branch lines.

The accident to No. 7 up express near Fatehpur on the East Indian Railway, on January 1, was due to the fracture of the leading tender axle left-hand journal, the immediate cause evidently being overheating and sudden cooling by the application of water.

Order for Branch Line Closure Suspended

The Kalukhali-Bhatiapara branch of the Eastern Bengal Railway, which [as recorded in our issue of March 14 last—ED., *R.G.*] is scheduled for closing, is now the subject of an appeal by the Government of Bengal to the Government of India against its closure. It is pointed out that owing to the silting up of two navigable rivers in the area served by the branch, retention of railway communication has become an urgent necessity in the public interest. Although the material on the branch is required for war purposes, an order suspending the closure has been issued by the Central Government.

Accidents

On January 20 a down passenger and down goods train collided at 8.30 p.m., as a result of which six passengers and the guard of the passenger train were injured. This accident occurred about seven miles from Tundla junction on the East Indian Railway main line from Calcutta to Delhi.

On the same line about 364 miles from Howrah (Calcutta) a goods train was derailed on the night of February 9, due to the removal of five fishplates from the track. Nine wagons were derailed, but no one was injured.

At 8.50 a.m. on February 13 a down light engine of the 0-6-0 tender type collided with a military lorry at a level crossing between Ferozepur and Lahore, on the N.W.R. One man was killed and five men in the lorry and the gatekeeper were injured.

UNITED STATES

Safety Record of the Louisville & Nashville Railroad

In a recent message to his "fellow employees," Mr. J. B. Hill, President of the Louisville & Nashville Railroad —popularly known as "Old Reliable"—remarks that no passenger has been killed in a train accident on that road for over 23 years, despite the fact that 246,000,000 passenger train-miles have been run in the intervening period. The average distance each passenger has been carried is 67 miles.

The accident record among employees during 1940 was 11 killed and 415 injured. Of the 11 fatalities all but two were the result of human failure—carelessness or thoughtlessness—and not to any fault in the condition of the equipment or surroundings.

The L. & N. Laboratory

To guard against inferior materials, faulty workmanship and specifications, the Louisville & Nashville Railroad maintains an elaborate testing laboratory at South Louisville staffed by a chemist and engineer and nine trained assistants. Though mainly employed on testing materials, some research work is also carried out at times. The activities of the laboratory are found to have a very salutory effect upon supply contractors and manufacturers.

One of the most important materials tested is coal, and as many as 2,000 reports upon coal tests are made annually. Incidentally, 115 coal mines are situated on the L. & N. system. There are two sections of the laboratory, one for chemical and the other for physical testing and investigation, and both are well-equipped with modern plant.

Increase in Accidents in 1940

The Interstate Commerce Commission has announced that 66 passengers lost their lives in train accidents on American railroads during 1940, as compared with only 13 in 1939. It must be remembered, however, that 1939 was a record year for safety in this country. The number of employees killed was 536, an increase of 7 per cent. over the 1939 figure, and the number injured was 17,890 or 5·5 per cent. more. The total number of train accidents rose to 7,106, or by 17 per cent., over the 1939 figure.

Level Crossing Fatalities Last Year

The Association of American Railroads' Safety Section states that 1,814 deaths resulted from level crossing accidents in 1940, the highest figure but one since 1930, and 416 more than in 1939. The number of persons injured at level crossings was 4,656 or 638 higher than in 1939.

SPAIN

Nationalisation

Under the Law of January 24, 1941, the State took possession of the whole of the broad gauge railway system in this country on February 1. [This was announced in general terms in an editorial on page 360 in our issue of March 28, but our correspondent now gives further details.—ED., *R.G.*]

The following are the railways now embodied in the State system: Northern, M.Z.A., Western-Andaluces, Central Aragon, Santander—Mediterranean, Zafra—Huelva, Lorca—Baza, Torralba—Soria, Alcantarilla—Lorca, Baza—Guadix, Valencia—Aragon, Silla—Cullera, Villacañas—Quintanar, Cinco Casas—Tomelloso, Bilbao—Portugalete, Villaluenga—Villaseca, Desierto—San Julian, Zafra—Portugal, and, in addition, the four lines already worked by the Government. The whole of the broad-gauge (5 ft. 6 in.) lines will now be worked as one system by a corporation, the Red Nacional de los Ferrocarriles Españoles, and the total route-mileage will be 12,432 km. (7,725 miles), including 1,600 km. (994 miles) of double track and 630 km. (391 miles) of electrified lines.

Mileage and Equipment

The following approximate figures will give an idea of the extent of this new State-owned enterprise. The system will comprise 1,477 stations and halts, and 190 private sidings, with three terminal stations in Madrid, four in Barcelona, two in Seville, and two in Valencia. In 1935, the year before the civil war, the companies now taken over owned 3,270 locomotives, including 74 electric, also 105 railcars, of which 58 were electrically propelled. Rolling stock comprised 5,300 carriages, 2,040 vans and 65,900 wagons. In the same year 82,000,000 passengers and 32,000,000 *tonnes* of merchandise were carried. Gross receipts were 780,000,000 pesetas (£19,500,000) and expenditure was 640 millions (£16,000,000). Capital stood in the balance sheets of the companies at 4,900 millions (£122,000,000), and their staff numbered, in all, 103,400 employees.

Great Increase in Traffic

Although the foregoing figures serve to give an idea of the importance of the new State enterprise, it should also be mentioned that the traffic has increased considerably since the civil war and since the shortage of petrol has affected road transport, notwithstanding the lack of the rolling stock destroyed in the war. Thus, for the three principal companies (Northern, M.Z.A., and Western-Andaluces) the total of passenger-km., which in 1935 was 3,170,000,000, had increased in 1940 to 5,619,000,000, and the total of *tonne*-km. similarly rose from 4,365,000,000 to 4,928,000,000 in the same period.

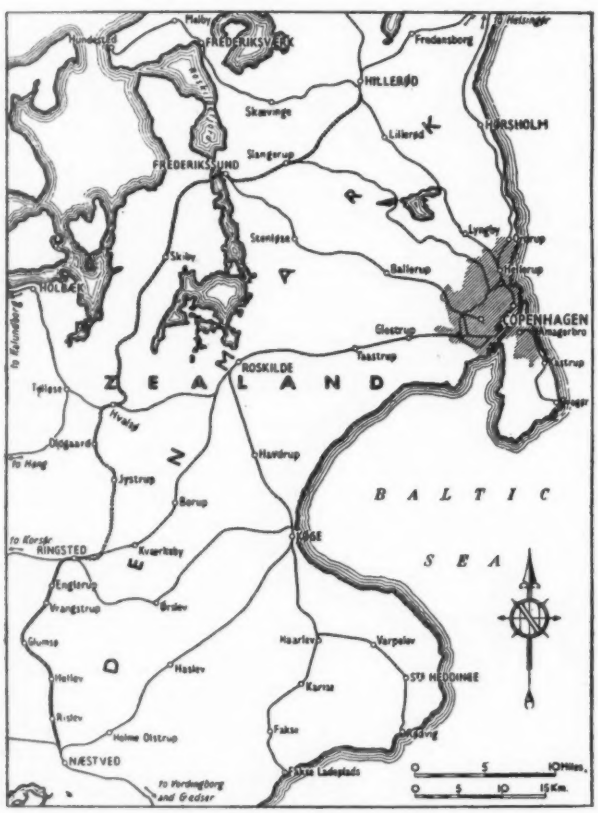
THE MID-ZEALAND RAILWAY, DENMARK

The history of an unusual 66-mile railway, in that more than three-quarters of it were abandoned before it was all completed. At one time 52 miles were open to traffic but now only 16·7 miles are in use

THE Mid-Zealand railway of Denmark has suffered the peculiar fate of being largely abandoned before it was ever quite completed. The line was originally proposed in 1901 by local interests which suggested that a railway should be built from Frederikssund *via* Hvalsø and Ringsted to Næstved, and that a through connection to Hillerød should be established.

The line is first mentioned officially in the findings, published in 1906, of a Parliamentary Commission appointed to make detailed proposals for new railways in Denmark. In this form the Mid-Zealand railway comprised two unconnected lines, a State line from Næstved to Ringsted, and a private line from Roskilde by Skiby to Frederikssund. The military representative pointed out that defence of Zealand would be assisted if the proposed Næstved—Ringsted line were extended through Hvalsø to Frederikssund.

The 1908 New Railways Bill included a State Railways line from Næstved *via* Ringsted, Hvalsø, Frederikssund, and Slangerup to Hillerød. In the notes accompanying the Bill it was said of the Næstved—Hillerød line that it might possibly be of importance for through traffic between Germany on one side and Sweden and Norway on the other. No military arguments were advanced in the actual Bill. The line was completed from Næstved to Frederikssund by the end of 1928, but work was stopped on the last lap to Hillerød, and the whole line, except the portion from Næstved to Ringsted, was finally abandoned as from May 15, 1936.



Map showing route of the Mid-Zealand line, Danish State Railways

It was decided to build the portion from Næstved to Ringsted as a double-track primary main line and thereby avoid constructing the proposed direct coast line from Copenhagen to Køge, which was also authorised in the 1908 Act. This decision has doubtless often been regretted since. The direct Køge line would have effectively shortened the Copenhagen—Gedser main line by about 10 miles, besides relieving the busy Copenhagen—Roskilde line and opening up a new suburban area to the south-west of Copenhagen, whereas the plan actually adopted shortened the distance by 1·3 miles only, and possessed neither of the other advantages mentioned.

An Unfortunate Bridge

Actual construction was begun in 1916 on the 26·8-km. (16·7-mile) Næstved—Ringsted section, the only portion of the line retained. The country traversed is undulating, necessitating considerable earthworks, but the ruling gradient is only 1 in 150. The work was dogged by misfortune almost from the outset. The embankments gave much trouble owing to settlement, and the largest engineering structure on this section, the bridge across the Susaa river, between Englerup and Vrangstrup, had in effect to be built more than twice, thereby delaying the opening of the line. In its original form the bridge consisted of a single reinforced concrete span of 67 ft. 2 in. It was built in the years 1918 to 1920, but owing to faulty design it quickly deteriorated under pressure of the adjoining embankments, and it was therefore decided to replace it by a bridge with three spans instead of one. Work on the replacement began in 1922, but owing to unprecedented rainfall and further settlements in the adjacent embankments, as well as the injudicious use of explosives, such alarming cracks occurred in the abutments of the original bridge that all construction traffic over it had to be suspended while temporary supports were being arranged. It was then found necessary to redesign the bridge yet again, in order that the old viaduct might safely be used during the construction of the new one.

The new structure is not remarkable for its beauty, but it is at least perfectly sound. It is 164 ft. long, with three clear spans of 38 ft. 4 in., 39 ft. 4 in. and 38 ft. 4 in. respectively, and the track is 50 ft. 6 in. above the river. When opened on June 1, 1924, the Næstved—Ringsted section had five intermediate stations, of which only the largest, Glumsø, was equipped with a relief siding. The track was laid to ordinary State Railways main-line standards with 45-kg. per m. (91 lb. per yd.) flat-bottom rails 15 m. (49 ft. 2 in.) long, with stone ballast for the running tracks and gravel ballast for the sidings. The stations at Næstved and Ringsted were enlarged to accommodate the new line. At Næstved the tracks were rearranged to give trains between Gedser and Ringsted a straight run through, and a maximum speed of 90 km.p.h. (56 m.p.h.) was allowed. At Ringsted the curve taken by Copenhagen—Næstved trains entails a speed restriction of 60 km.p.h. (37 m.p.h.). The new line was at first used by the expresses between Copenhagen and Germany *via* Gedser, a few goods trains on the same route, and four local stopping trains in each direction daily.

The line is equipped throughout with standard signalling but at Ringsted, after several years of temporary signalling arrangements, a single-control power signal box was brought into use, and at Næstved smaller distributed power boxes.

Work on the next section, from Ringsted to Hvalsø, the junction with the secondary main line from Roskilde to

Kalundborg, was begun in 1918, and it was opened to traffic on August 15, 1925. It was 22·9 km. (14·2 miles) long, and there were three intermediate stations, of which only one, Jystrup, was arranged as a crossing place. The line was single throughout and laid with 12-m. (39-ft. 4-in.) rails weighing 37 kg. per m. (75 lb. per yd.) on gravel ballast, with a ruling gradient of 1 in 150. A maximum speed limit of 70 km.p.h. (43·5 m.p.h.) was imposed. As on the first section, there were practically no level crossings. This section includes two skew bridges on which the line is carried across the Copenhagen—Korsør and Roskilde—Kalundborg lines, east of Ringsted and west of Hvalsø, respectively. The Kalundborg line is single, but its possible future doubling had been taken into account. The then highest railway summit on Zealand occurred on this section; it was at Oldgaard station where the rail level was 84·3 m. (276 ft. 6 in.) above sea level.

The first timetable of the Ringsted—Hvalsø line showed only five stopping trains each way daily; no other trains were run over the section in question. One northbound and two southbound trains had fairly good connections with Ringsted—Næstved trains, but generally speaking these two portions of the Mid-Zealand line were treated as independent branches, and main-line connections were considered more important than their interconnections, a point of view that always persisted. At Hvalsø, as at Næstved and Ringsted, temporary signalling arrangements persisted for some years, and the new signalling was not finished till 1939.

Hvalsø—Hillerød Section

The third section, from Hvalsø to Frederikssund, was opened on November 17, 1928, its construction having taken nine years to complete. The length was 34·1 km. (21·2 miles), and there were nine intermediate stations, of which two, Kirke Saaby and Skiby, were equipped as crossing places. The country traversed is flatter and more open than on the other sections, and the permanent way was identical with that on the Ringsted—Hvalsø portion. The largest engineering structure on the whole Mid-Zealand railway was on this section, namely the 745-ft. bridge across the Roskildefjord about $\frac{5}{8}$ mile west of Frederikssund. This bridge comprised five fixed spans of about 125 ft. each, and a single bascule span with a free navigation opening of 98 ft.; the headway under the fixed spans was 10 ft. and the maximum depth of water at the site of the bridge was about 29 ft. 6 in. It was built between 1925 and 1928, and cost about £55,000 (at par). There were two speed restrictions, one of 45 km.p.h. (28 m.p.h.) on the sharp curve connecting the eastern end of the bridge with Frederikssund station, and the other of 30 km.p.h. (19 m.p.h.) across the bridge itself. The fjord is about 1 mile wide at this point, and the approach embankments are about $\frac{5}{8}$ and $\frac{1}{4}$ mile long, west and east of the bridge, respectively. These embankments also gave much trouble during their construction, especially the western one, on which one contractor failed to complete his portion. The station at Frederikssund, where a secondary State Railways line from Copenhagen terminates, was replaced by a new and larger one on an adjacent site, in order to accommodate the new lines to Hvalsø and Hillerød; the reconstruction was in hand from 1929 to 1934. It was originally proposed to build the Frederikssund bridge with two fixed spans and one swing span of 164 ft. each.

Before the completion of the Hvalsø—Frederikssund portion, traffic on the remainder of the line had been taken over by railcars and increased to six trains a day each way between Ringsted and Hvalsø, with a couple extra between Ringsted and Næstved; after the extension to Frederikssund, the twelve trains between Ringsted and Hvalsø were extended to run to and from Frederikssund, with stops at Hvalsø varying from 2 to 35 min. as required by connections there and at Frederikssund. No other trains were run between Ringsted and Frederikssund, with the exception of the extension of one Copenhagen—Frederikssund train on Sunday nights to Skiby. The Næstved—Ringsted trains were always treated as independent of the others, and interconnections at Ringsted were bad for nearly all trains.

The last section, from Frederikssund to Hillerød (about 14 miles) was never completed. Work on it was begun in 1922, but it was stopped from 1927 to 1929, and finally abandoned in 1932, when the earthworks and bridgework were completed and the permanent way had been laid about 2 miles from Frederikssund. There were to have been three intermediate stations, of which Slangerup was to be the most important. This little town is the terminus of a private railway from Copenhagen which carries a considerable amount of passenger traffic. It was intended to collect all traffic here at the existing station, and in 1931 some half-a-mile of the private line was diverted in order to make room for the new State line. The station at Hillerød was entirely remodelled during the period 1929 to 1934, to accommodate the new second track from Copenhagen and the line from Frederikssund, as well as to give improved interchange facilities between the State and private lines radiating from Hillerød. The equipment of the Frederikssund—Hillerød line was to have been similar to that of the Ringsted—Frederikssund portion.

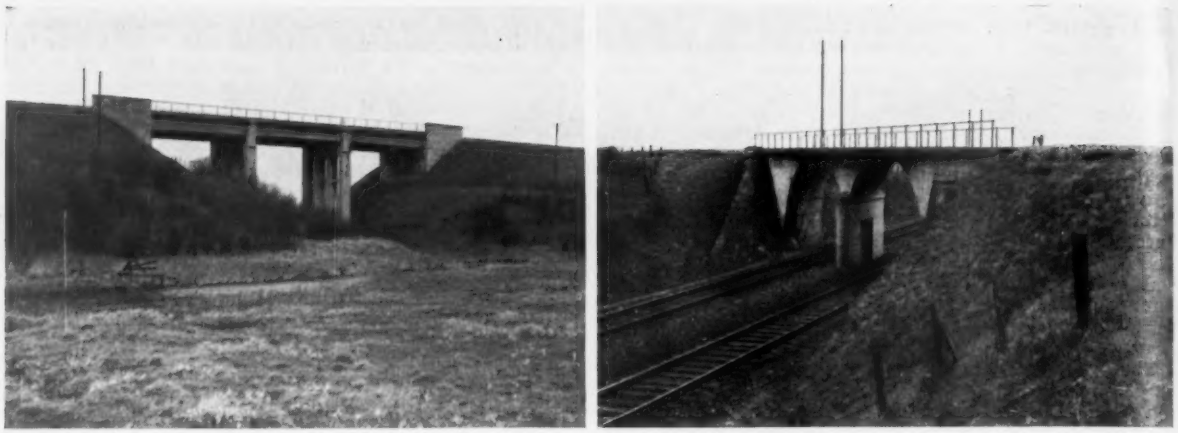
Closing the Line North of Ringsted

The reasons for the early demise of the Ringsted—Frederikssund (—Hillerød) line were many, but the chief was lack of traffic: the expected through international traffic did not materialise, owing partly to the opening of the Sassnitz—Trälleborg direct train ferry route between Germany and Sweden in 1909 and the then non-existence of the Storstrøm bridge, the growth of road motor traffic, the fact that many of the stations were situated far from the villages they were intended to serve, and finally the general Parliamentary demand that the State Railways should be worked more economically. The line was therefore closed as from May 15, 1936. At the last moment the private Hillerød—Frederiksværk—Hundested line offered to take over the operation of the unfinished Hillerød—Slangerup—Frederikssund section if the track laying were completed; this offer was, however, rejected. A further contributory cause for the decision to close the line was the urgent necessity for building a new railway bridge across the Limfjord between Aalborg and Nørresundby in Jutland; by using the steel superstructure and the machinery of the Frederikssund bridge at the Limfjord, a considerable reduction in total cost and in foreign currency required could be obtained. This was referred to in the article describing the Limfjord bridge in THE RAILWAY GAZETTE for July 15, 1938.

Removing a 745-ft. Bridge

The removal of the six spans from Frederikssund to Aalborg took place in the autumn of 1936 in two stages; the spans were supported three at a time on two pontoons. The most ticklish part of the job was the navigation through the opening span of the road bridge at Frederikssund. In order to accomplish this it was necessary to transport one span at a time slewed round on the pontoons, so that it passed practically lengthwise through the opening in the road bridge. Temporary timber piers to support two spans of the railway bridge were driven north of the road bridge, so that the first two spans could be deposited there until the pontoons arrived with the third, after which all three spans were loaded broadside on to the pontoons in preparation for the journey to Aalborg, where they were unloaded on a temporary staging. The whole business was then repeated with the three remaining spans. The work was carried through without a hitch. The piers and abutments at Frederikssund remain in place. The heavy concrete counter-balance weight of the opening span was demolished before transport and built up again on arrival at the new site.

It was at first suggested that the roadbed of the Hillerød—Frederikssund—Ringsted line might be used as a motor road or a cycle path. The formation is, however, too narrow for a road, and the second solution would be much too expensive in comparison with the traffic to be expected, so both these ideas were abandoned. The rails have now been taken up and used for strengthening secondary lines in West Jutland, and negotiations were proceeding at the time of the German invasion of Denmark with landowners along the line with a view to selling the land, which had been acquired in sufficient width for a double track. Many of the station buildings had been let and adapted as private dwelling houses. The sections now closed to traffic were originally worked by light steam locomotives, largely of the well-known 2-4-2 tank

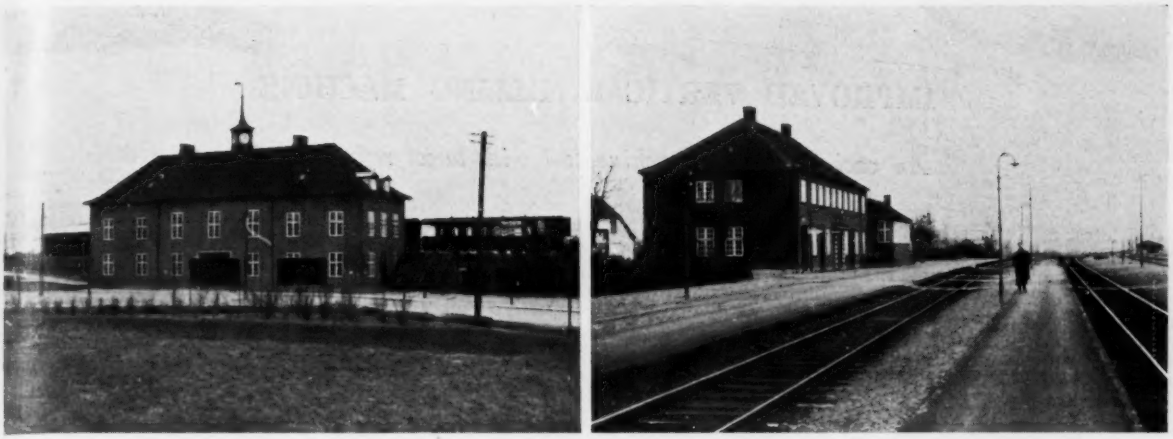


Left : The Susaa bridge on the Ringsted-Næstved section, and, right, the bridge carrying the Mid-Zealand line across the Korsør main line at Ringsted

The Roskildefjord bridge at Frederikssund : Right, The part that remained in 1937 after the removal of the superstructure to the Limfjord ; and, left, the complete bridge, with the bascule span open, before the closing of the Mid-Zealand line in 1936

Left : Concrete bridge at Nørre Herlev over the derelict line : and, right, the derelict line at Oldgaard station

SCENES ON THE MID-ZEALAND LINE OF THE DANISH STATE RAILWAYS

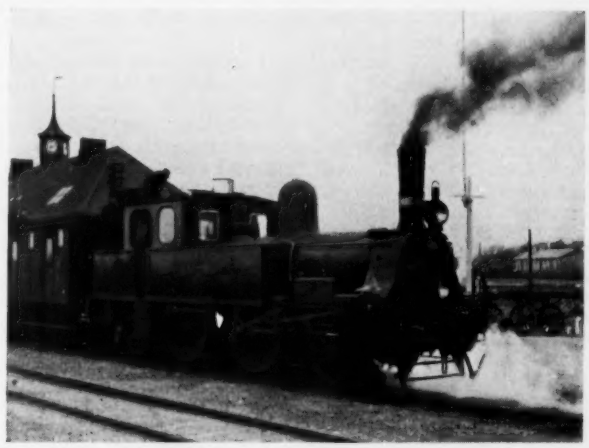


Left: The present station at Frederikssund, built to accommodate the Mid-Zealand and the Copenhagen branch trains, in replacement of the old station of the latter. Right: Glumsø station on the Ringsted-Næstved section, now part of the Copenhagen-Gedser main line

class, but from their advent in 1929 the petrol-electric railcars of class "ML" entirely monopolised all traffic until, when economy measures were introduced, they were displaced by light petrol-mechanical railcars. One train each way daily was steam-hauled to dispose of goods wagons which the larger but not the smaller railcars could handle. During the short life of the Ringsted—Hvalsø—Frederikssund line three new halts were opened on each of these sections, making a total of six between Ringsted and Hvalsø and twelve between Hvalsø and Frederikssund. A little-considered advantage of the whole line was that it provided several alternative routes for use in emergencies, although the heaviest engines were permitted only on the southernmost section.

The end of this ambitious railway project was, under the prevailing financial criticism, inevitable, but, from the railway point of view, none the less regrettable on that account. The work was of such a magnitude, however, that it is highly improbable that all traces of the abandoned sections will ever disappear completely. Certainly for many years to come the railway student will have no difficulty in tracing the progress of the abandoned portion of the Mid-Zealand railway through the smiling Danish landscape, and the Limfjord bridge at Aalborg will also remain as a visible reminder of a railway line which was wanted before it was built and was wanted no longer when it was finally ready.

(*Editorial comment will be found on another page*)



Class "O" 2-4-2 tank locomotive, Danish State Railways, on a Mid-Zealand train at Frederikssund. The weathercock on the clock tower takes the shape of a locomotive of this class

Left: Light petrol-mechanical railcar with trailer at Struer, of the type which worked on the Mid-Zealand line from 1933 till its closing in 1936. Right: Petrol-electric railcar of Class "ML" and trailer at Ballerup, of the type first used on the Mid-Zealand line of the Danish State Railways

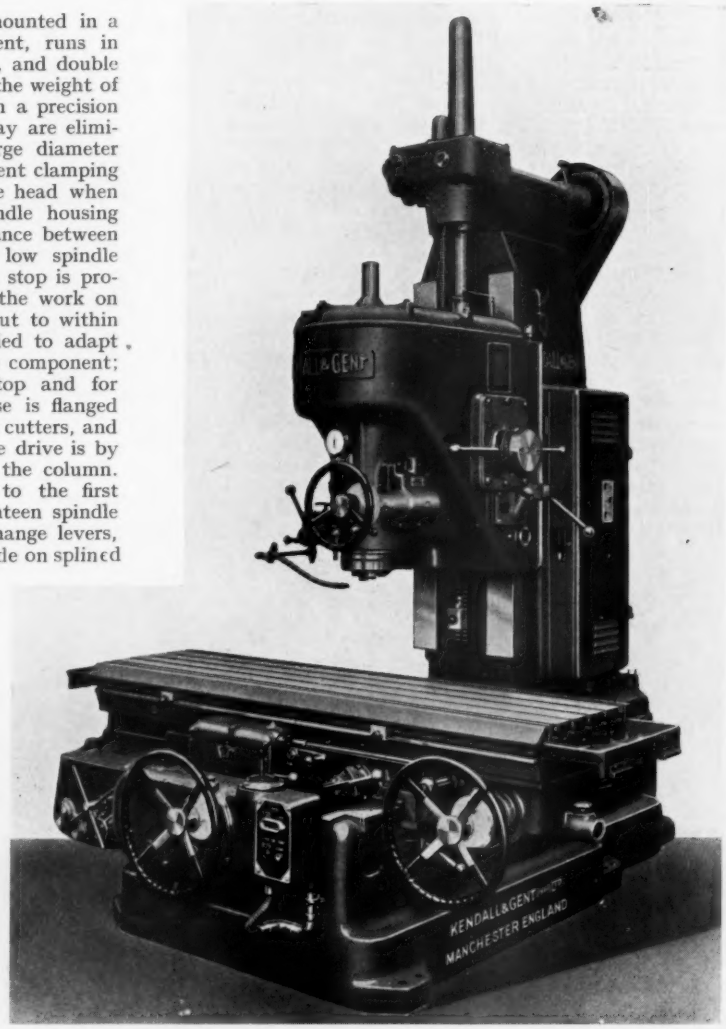
IMPROVED VERTICAL MILLING MACHINE

An easily operated machine tool with latest refinements

THE latest milling machine, model C.V.M.25, introduced by Kendall & Gent (1920) Ltd., of Gorton, Manchester, has been improved by the addition of built-in electrical control gear and dial change feed mechanism. The main sliding surfaces and table guides, directly under the milling spindle, give ideal table support under cut, and two well spread auxiliary sliding surfaces ensure stability. The base rear extension forms the coolant tank, and an impeller coolant pump is submerged in a small auxiliary tank which prevents fouling and facilitates cleaning. All the driving gears are self-contained within the milling head, and a horizontally mounted constant-speed reversible motor at the top of the column, push-button controlled, raises and lowers the head. An electric limit switch prevents over-running in the upward direction, and the downward movement can be limited by means of an adjustable dead stop, contact with which operates a slipping clutch. A simple lock secures the head in position whilst milling.

The heat-treated high-tensile steel spindle, mounted in a large diameter sleeve with fine hand adjustment, runs in anti-friction bearings which take the radial load, and double thrust washers take the reaction of the cut and the weight of the spindle. The drive is through six splines in a precision broached driving wheel. Back-lash and end-play are eliminated by a patented arrangement, and the large diameter micrometer dial permits of easy reading. Efficient clamping is provided for locking the sleeve rigidly in the head when in operation. The sleeve type method of spindle housing gives a short spindle length with minimum distance between the spindle drive and cutter and consequent low spindle torque. A dial indicator with adjustable depth stop is provided; this eliminates the constant checking of the work on the table and enables the operator to set the cut to within 0·001 in. A series of these stops can be supplied to adapt the machine for a sequence of operations on one component; the indicator can also be used as a dead stop and for checking spring in the head. The spindle nose is flanged for direct mounting of large diameter face milling cutters, and is bored to B.S.I. non-stick taper tolerances. The drive is by a constant speed motor carried on the side of the column. Multi, endless V ropes transmit the motion to the first driving shaft on the top of the column. Eighteen spindle speeds are obtainable by conveniently placed change levers, and the gears, of heat-treated nickle-chrome, slide on splined shafts. Stopping of the spindle driving motor in any circumstances automatically stops the feed motor. The table feed motor can be operated for setting purposes with the spindle stationary.

The table is of deep section with tee slots cut from the solid. Coolant troughs with strainers are provided, and the return to the tank is effected without the use of trailing hose. Longitudinal traverse is through a worm and semi-circular rack, substantial ball washers taking the thrust. The worm and rack are cast by a special process which guarantees exceptionally close-grained castings of high wearing quality. In-traverse is by a large diameter steel screw completely protected against falling chips. Here again thrust in each direction is taken by heavy ball washers, and hand adjustment to both longitudinal and in-traverses is controlled by large diameter handwheels with micrometer dials. Rapid power motion for quick table movement is provided in both directions; the table ways are protected against swarf by covers. The table feeds are reversible and obtained from a horizontal reduction gearing to the change-feed box. The box is mounted under the left hand end of the table with a direct-reading feed change indicator projecting to the front. The enclosed sliding gears of heat-treated nickel-chrome run in an oil bath and provide eight changes of table feed for each spindle speed. The direction of the table traverse is controlled electrically by a switch which, when placed in any of the four positions, determines the direction of the traverse. The provision of electrical directional selection obviates the possibility of conflicting motions being engaged. The feeds can be tripped at any pre-determined position by means of adjustable stops. The coolant system is operated by an electric impeller pump at the rear of the base and is push-button controlled. From the table, the coolant is strained before returning to the sump.



Improved Kendall & Gent vertical milling machine

RAILWAY NEWS SECTION

PERSONAL

THE LATE SIR NIGEL GRESLEY

In the announcement in *The Times* of the death of Sir Nigel Gresley it was stated : " By his own wish will friends who would have sent flowers please send instead a donation to the Railway Benevolent Institution." As a result, we are informed by Mr. H. C. Walton, the General Secretary, that the Railway Benevolent Institution has benefitted to the extent of £103 9s. 6d.

Mr. B. F. Bishop

Appointed District Estate Agent, Swansea, Great Western Railway

Mr. B. F. Bishop, who, as recorded in our April 11 issue, has been appointed District Estate Agent at Swansea, Great Western Railway, entered the G.W.R. at Hereford in 1903 and six years later was transferred to the Estate Department at Paddington. He was appointed Chief Clerk in the District Estate office at Oxford in October, 1911, and to a similar position at Bristol in July, 1920. Two years later he became Repairs Inspector at Paddington, and from March, 1931, he has been head of the tenancy section in the Chief Office of the department. Mr. Bishop held a Commission in the North Staffs. Regiment in the last war, served in France, and was awarded the Military Cross for gallantry in the field. He is a keen and accomplished lawn tennis player, and has represented the British railways in international matches.

The Secretary of State for the Colonies has recently approved the following appointment :—

Mr. L. C. H. Cole to be Maintenance Engineer, Transport & Harbours Department, British Guiana.

NEW SOUTHERN RAILWAY DIRECTORS

Sir William Crawford Currie, whom the directors of the Southern Railway Company have co-opted to the board to fill the vacancy caused by the retirement of the late Lord Rockley (as recorded at page 429 of our April 11 issue) is Chairman and Managing Director of the Peninsular & Oriental Steam Navigation Company and the British India Steam Navigation Co. Ltd. He is a former Sheriff of Calcutta, a past President of the Bengal Chamber of Commerce and of the Associated Chambers of India, Burma, and Ceylon, and a former member of the Bengal Legislative Council and of the Council of State. He was President of the Chamber of Shipping of the United Kingdom in 1929 and a member of the Imperial Shipping Committee from 1927 to 1931.

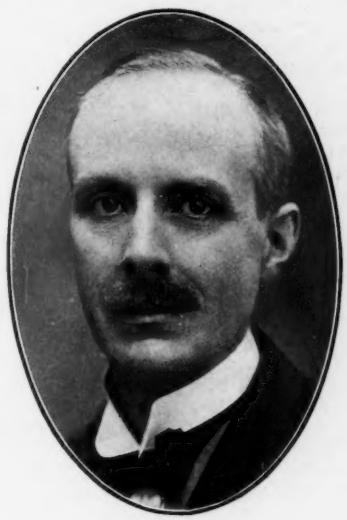
Mr. William Patrick Spens, O.B.E., K.C., M.P., whom the directors of the Southern Railway Company have co-opted to the board to fill the vacancy caused by the death of Mr. Henry Mansbridge (as recorded at page 227 of our February 28 issue), has re-established a family connection with the company, as his father, the late Nathaniel Spens, was a Director of the former London, Chatham & Dover Railway Company and a member of the S.E. & C.R. Companies Managing Committee. Mr. Spens, who is M.P. for the Ashford Division of Kent, was Captain and Adjutant 5th Batt. The Queen's Royal Regt. 1914-18, and served in India and Mesopotamia (dispatches three times, O.B.E.). He has been a Commissioner on the Imperial War Graves Commission since 1931, and is a member of the Bacon Marketing Board.

Mr. Thomas Walter Matcham, of Worthing, retired on April 3 after 45 years of railway service. Mr. Matcham began his career with the London & North Western Railway at Euston in 1896, and served in the London district until he was appointed District Traffic Agent for the L.M.S.R. in Sussex and the border districts of Surrey and Hampshire. He has been Joint Agent for the L.M.S.R., L.N.E.R,. and G.W.R., at Brighton, since 1935.

Mr. Michael Frederick Keogh, Dublin, formerly General Manager, Great Southern Railways Company, left personal estate in Great Britain and Eire valued at £21,931. We published a biographical note and a portrait of Mr. Keogh in our December 20 issue.

Lt.-Colonel Lord Dudley Gordon, D.S.O., was on April 9 re-elected President of the Federation of British Industries for the second successive year.

Mr. Ernest Frank Bone, Assistant to the Docks & Marine Manager, Southampton, Southern Railway, whose impending retirement we recorded last week, was born in 1881 and educated at Taunton's School, Southampton. He joined the L.S.W.R. at Southampton in 1897 as a junior clerk, and after passing through various grades, was appointed, in 1912, clerk in charge of claims for the Shipping Traffic Department at Southampton. In 1921 he was transferred to the Dock Manager's Office in the Commercial Department, and a year later became Commercial Assistant to the Docks Manager. In January, 1924, Mr. Bone was made Commercial & Indoor Assistant, Docks & Marine Department, Southern Railway. In 1926 he became Assistant to Docks Manager, and in 1934 was made Assistant to the Docks & Marine Manager. Mr. Bone is an Associate Member of the Institute of Transport and a Fellow of the Royal Statistical Society.



Mr. E. F. Bone

Assistant to the Docks & Marine Manager, Southern Railway, 1934-1941

Mr. Henry K. McHarg, President of the Detroit & Mackinac Railway, died at Ridgefield, Conn., on January 28 in his 90th year.

Mr. Robert E. Connolly, Secretary & Treasurer, Illinois Central Railroad, has been appointed Vice-President as from March 1. He will be in charge of the accounting, treasury, and secretarial departments. Mr. Connolly was born in New York City, and began work with the Illinois Central as a clerk in the New York office in 1902. He became Assistant Treasurer in 1916 ; Treasurer

in 1918; and Secretary & Treasurer in 1933. In 1938, with the removal of the headquarters of the board of directors from New York to Chicago, he was transferred to Chicago.

Mr. J. H. Rigby, Superintendent, Columbus & Greenville Railway, has been appointed General Manager.

Mr. Fred C. Paulsen, General Superintendent, South Central District, Union Pacific Railroad, has been made Assistant General Manager of the same district.

Mr. William G. Hunton, Agricultural & Industrial Agent, Maine Central Railroad, has retired. He is being succeeded by Mr. Harold R. Cummings, who will include the position of Industrial Agent with his present one of Real Estate & Tax Agent.

Mr. A. J. Parr, General Freight & Passenger Agent, Temiskaming & Northern Ontario Railway, has been appointed Traffic Manager. Mr. R. P. C. McLeod is to succeed Mr. Parr as General Freight & Passenger Agent.

Mr. James Peter Dervin, Assistant Freight Traffic Manager, New York Central System, has been appointed Freight Traffic Manager.

Mr. Bernard W. Hanson has been appointed Traffic Manager, Union Pacific Railroad.

Mr. Warren Robert Elsey, Mechanical Engineer, Pennsylvania Railroad, has been appointed General Superintendent, Motive Power.

Mr. Carleton K. Steins, Assistant Chief of Motive Power, Pennsylvania Railroad, has been appointed Mechanical Engineer.

Mr. Harry W. Jones has been appointed Chief of Motive Power, Pennsylvania Railroad.

Mr. Robert E. Connolly, Treasurer, Illinois Central System, was elected a Vice-President in charge of the Accounting, Treasury, & Secretarial Departments.

Mr. B. M. Durland, Assistant Signal Superviser, Denver & Rio Grande Western Railroad, has been appointed Signal Construction Engineer.

Mr. Harold W. Burtness, Assistant to the Trustees & Secretary, Chicago Great Western Railway, has been elected Vice-President, Transportation.

Mr. Patrick H. Joyce, a Trustee of the Chicago Great Western Railroad, has been elected President & Chairman of the Executive Committee of the newly-incorporated Chicago Great Western Railway Company. The new incorporation on February 19 marks the end of receivership which began on February 28, 1935.

Mr. W. B. McKinstry, Comptroller, Illinois Central System, retired on March 1, and the position of Comptroller has been abolished.

Mr. Scott M. Loftin and Mr. Edward W. Lane have been appointed Trustees of the Florida East Coast Railway.

We regret to record the death on April 14 of Mr. Francis John Geary, Costs Officer, London Passenger Transport Board. Mr. Geary entered the service of the North Metropolitan Tramways Company in 1892 when that company operated the horse tramway system of north and north-east London. In 1902 he was made Assistant Accountant and in 1906, when the company's undertaking was taken over by the London County Council, was transferred to the Council's service as Chief Bookkeeper. He was appointed Tramways Accountant in 1930, and in 1933, when the London Passenger Transport Board was formed, he became Costs Accountant (Tramways). In 1936 he was appointed Costs Officer. Mr. Geary had a varied career in London tramway working, and had had experience in most of the branches. He served with the Royal Artillery during the 1914-1919 war as sergeant gunnery instructor. He was a Fellow of the Institute of Public Administration and was President of the London County Council Staff Association for 1924-1925. He was also keenly interested in dramatic art and was Acting Chairman of the London Transport Musical & Dramatic Society and also Chairman of the Dramatic Section.

Elliott] *[& Fry*

The late Mr. F. J. Geary

Costs Officer, London Passenger Transport Board, 1936-1941

The Joint Committee, Sheffield Omnibus Services (Sheffield Corporation and L.M.S. and L.N.E. Railways) recently presented to Mr. C. J. Selway, C.V.O., C.B.E., an illuminated album containing a resolution recording its appreciation of the benefits received from Mr. Selway's association with the committee since its inception in 1928. The establishment on a sound and efficient foundation of the joint working arrangements between the municipality and the railway companies was materially assisted by his extensive experience, wise counsel, and helpful advice. Mr. Selway was Chairman of the committee during the years 1932 and 1936.

The Halifax Joint Omnibus Committee (Halifax Corporation, L.M.S. and L.N.E. Railways) recently presented to Mr. C. J. Selway, C.V.O., C.B.E., an illuminated album containing a resolution of the committee recording high appreciation of the services rendered by Mr. Selway in the successful negotiations which led to the formation of the committee in April, 1929, and subsequently his sound and valuable advice which has contributed to the ever-increasing growth and success of the committee's operations. Mr. Selway was Chairman of the committee during the years 1932 and 1936.

We regret to record the death of Mr. John Law who from 1931 to 1936 was a Yorkshire Traffic Commissioner.

The President of the Board of Trade has appointed Mr. Raymond Evershed, K.C., Chairman of the Central Price Regulation Committee, to be a Member of the Industrial & Export Council.

Mr. T. W. Smith who, as recorded in our April 11 issue, has been appointed Joint Stationmaster at Bristol (Temple Meads), joined the G.W.R. in January, 1902, in the Traffic Department at Mountain Ash. After additional station experience at other places he was attached to the Divisional Superintendent's office at Cardiff in March, 1914. In February, 1930, Mr. Smith was appointed Stationmaster at Bridgend, and remained there until March, 1935, when he assumed the position of Chief Parcels Clerk at Cardiff. In January, 1937, he was appointed Stationmaster at Swansea (High Street), the post he now vacates to take up the new position at Bristol (Temple Meads), G.W.R. & L.M.S.R. Joint.

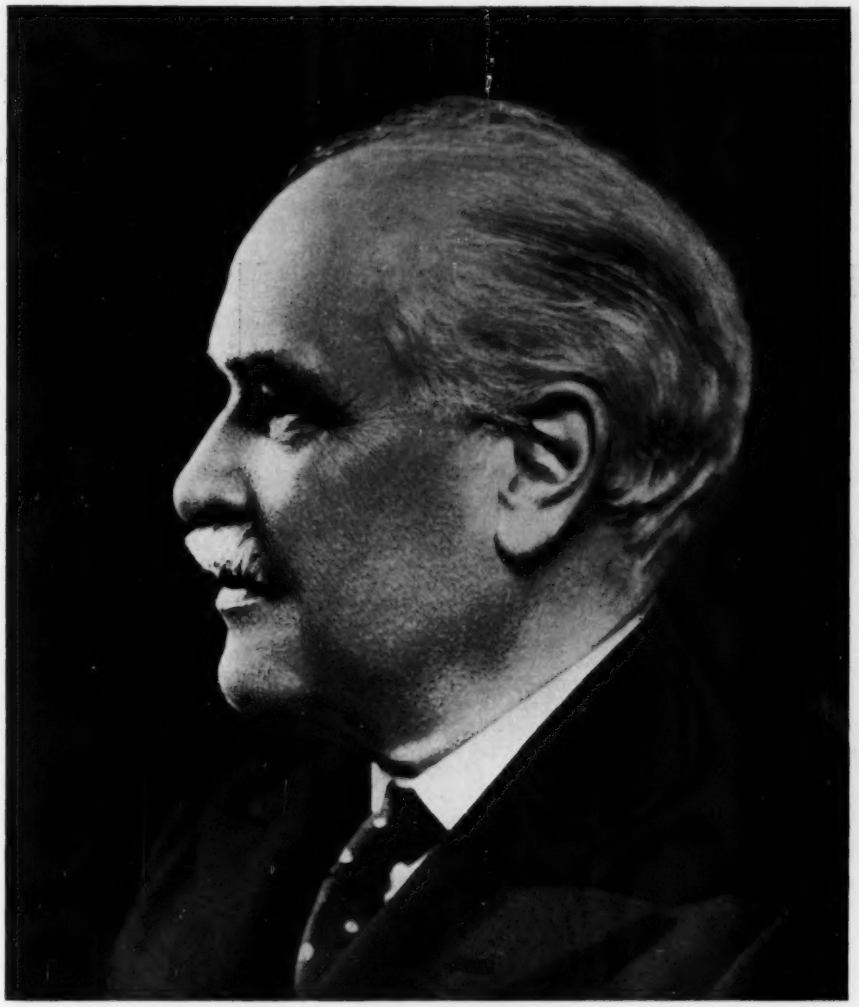
Major-General Nikolaidis has been appointed Minister of Communications & Railways, in the newly-appointed Greek Cabinet.

Indian Railway Staff Changes

Mr. H. H. Cooper, Superintendent of Mechanical Workshops, N.W.R., has been appointed to officiate as Chief Mechanical Engineer of that railway as from January 18.

Mr. H. M. Walker has been appointed to officiate for Mr. Cooper as Superintendent, Mechanical Workshops, N.W.R., as from the same date.

JOSIAH CHARLES, 1st BARON STAMP OF SHORTLANDS



Lord Stamp of Shortlands

Chairman of the London Midland & Scottish Railway Company, 1927 to 1941
President of the Executive, L.M.S.R., 1926 to 1941
Director of the Bank of England, 1928 to 1941

We regret to record the death on April 17, as the result of enemy action, of Baron Stamp of Shortlands in the county of Kent, Chairman and President of the Executive of the London Midland & Scottish Railway Company. With him died Lady Stamp and their eldest son, Wilfrid Carlyle.

Josiah Charles Stamp was born on June 21, 1880, and was educated at London University (Faculty of Economics & Political Science), where he took the degree of B.Sc., with First Class Honours, in 1911; became Cobden Prizeman in 1912; D.Sc. in 1916; and Hutchinson Research Medallist also in 1916. He was Newmarch Lecturer on Statistics in 1919-21 and 1923, and External Examiner in Public Administration, British Constitution, etc., in 1919-21. He was a member of the Council of the Railway Statistical Society from 1916 and was Guy Medallist in 1919. In 1920 he was appointed Joint Honorary Secretary of the society and Editor of its *Proceedings*, an office he held until 1930; was President of the society, 1930-32; and afterwards Honorary Vice-President. In 1920 he became a member of the council of the Royal Economic Society.

Stamp entered the Civil Service in 1896 in the Inland Revenue Department, and in 1898 was appointed to the Marine Department of the Board of Trade. In 1900 he went to the Taxes Department of the Inland Revenue Department and was transferred in 1914 to the Secretariat; he became Assistant Secretary to the Board of Inland Revenue in 1916. He resigned from the Civil Service in March, 1919, to become secretary to, and a Director of, Nobel Industries Limited, offices he held until 1926. That company became merged into Imperial Chemical Industries Limited (in December, 1926) and Stamp occupied a seat on the I.C.I. board in 1927-28.

His first connection with British railway service was in May, 1925, when the directors of the London Midland & Scottish Railway Company announced that, in view of the experience of amalgamation, they had been considering the organisation of the executive control of the company and had decided to create the post of President of the Executive. Sir Josiah Stamp (as he then was) accepted the

invitation of Sir Guy Granet (then Chairman of the L.M.S.R.) to take this position, and the directors of Nobel Industries Limited agreed to free him from his administrative duties at the end of 1925, while retaining his services on the board of that company. Accordingly, he took up his post with the London Midland & Scottish Railway on January 4, 1926. A further official statement was made in October, 1926, announcing the abolition of the post of General Manager of the London Midland & Scottish Railway, after the retirement of the Rt. Hon. H. G. Burgess on March 31, 1927, and stating

Lord and Lady Stamp at the L.M.S.R. photographic exhibition in March, 1937

that the executive control of the company's business would be vested in the President of the Executive, together in the first instance with four vice-presidents, who would form the executive committee, assisted by the Secretary and the Chief Legal Adviser. The appointments of the four Vice-Presidents were made as from January 1, 1927, and thus this new departure in British railway control came into being.

At a meeting of the board of directors of the London Midland & Scottish Railway Company on July 28, 1927, the directors received with regret an intimation from Sir Guy Granet that he desired to retire from the chairmanship of the company in the next October, owing to other calls on his time. Stamp was elected a Director of the company and designated to succeed Sir Guy Granet in the chair, while retaining his position as President of the Executive.

For many years past Stamp has taken part in national affairs, first as British representative on the Reparation Commission's (Dawes) Committee on German Currency & Finance (1924), and then as a member of the Committee on Taxation & National Debt (also 1924). On the last day of 1928 a statement issued from Treasury Chambers, Whitehall, announced that the Chancellor of the Exchequer had nominated Stamp to be one of the two British members of the proposed committee of experts (the Young Committee) which it had been decided to set up in order to frame proposals for the final and definite settlement of the reparation problem; this duly sat in 1929. Some reference to the work of these committees, and their relation to the formation and operations of the German State Railway Company is made in an editorial article on page 467. In 1928 he was given a seat on the court of directors of the Bank of England, and held this up to the time of his death. He was a Member of the Economic Advisory Council, and has been Adviser in Economic Co-ordination to Ministerial Committee since its establishment in October, 1939. His membership of the new War Transport Council was announced as recently as April 5 last.

Among other public services may be included Stamp's membership of the Royal Commission on Income Tax, 1919; the Northern Ireland Finance Arbitration Committee, 1923-24; and the Court of Inquiry, Coal Mining Industry Dispute, 1925. He was also Statutory Commissioner under the London University Act, 1926; Chairman of the Grain Futures Inquiry, Canada, 1931; and Chairman of the Lambert-Levita Case Enquiry, 1936.

In 1918 he received the C.B.E. and in 1920 the K.B.E. He was created G.B.E. in 1924, and G.C.B. in 1935. In the Birthday Honours of 1938 he was elevated to the Peerage, with the title of Baron Stamp of Shortlands, in the County of Kent. He was Knight of Grace, Order of St. John of Jerusalem; and held the Grand Cross with Star, Austrian Order of Merit, 1936.

His honorary academic distinctions were numerous and world-wide, and included the following Hon. D.Sc. Oxford; Hon. D.Sc. Cambridge; Hon. LL.D., St. Andrews, Edinburgh, Leeds, Dublin, Sydney, McGill, Toronto, Western Ontario, MacMaster, Harvard, Columbia, California, North-western, Johns Hopkins, South-western, Syracuse, Duke, Washington, and Lee; Hon. Dr. of Economics, Lisbon; Hon. Dr. of Law, Athens; D.Sc. (Econ.) London; Hon. Associate, College of Technology, Manchester University. He was an honorary member of the Society of Incorporated Accountants & Auditors; F.B.A. 1926.

Stamp was a Member of the London University Senate, 1924-26, and of the Board of Studies in Economics, and other university committees; and at various times examiner (Economics, Political Science, Statistics, etc.) for Cambridge, London, Manchester, Edinburgh, and Glasgow Universities, and the Society of Incorporated Accountants. He was Chairman of the London School of Economics and held many other academic positions as lecturer, chairman of schools, and governor.

Lord Stamp was President of the Abbey Road Permanent Building Society, the President of the Institute of Transport for the year 1929-30, and President of the British Association for the Advancement of Science in 1936. In addition, he was President of many institutions concerned with economics, statistics, and cognate subjects. Moreover, he was Colonel Commanding (R.E.) Transport & Railway Corps, and Honorary Colonel, Transportation Unit, Royal Engineers, Supplementary Reserve.

Lord Stamp's publications include: "British Incomes & Property"; "The Application of Official Statistics to Economic Problems," 1916 (3rd edition, 1922); "Wealth & Income of the Chief Powers," 1919; "The Fundamental Principles of Taxation in the light of Modern Developments," 1921 (2nd edition, 1923, revised edition, 1937), Italian translation, 1934; "Wealth & Taxable Capacity," 1922 (2nd edition, 1923); "Joint Report on Double Taxation" (League of Nations), 1923; "Business Statistics and Financial Statements," (with C. H. Nelson), 1924; "Studies in Current Problems in Government & Finance," 1924; "Report on Effect of Reparation Payments on Industry" (International Chamber of Commerce), 1925; the British edition of Rignano's "Social Significance of Death Duties," 1925; "The Christian Ethic as an Economic Factor," 1926; articles in the "Encyclopædia Britannica, 13th and 14th editions; "The National Income," 1924 (with Professor Bowley), 1926; "On Stimulus," 1927; "Some Economic Factors in Modern

Life," 1928; "Criticism & Other Addresses," 1931; "Internationalism," 1931; papers on Gold and the Price Level, 1931; "The Financial Aftermath of War," 1932; "Taxation during the War," 1932; "Ideals of a Student," 1933; "Motive & Method in a Christian Order," 1936; "The National Capital & other Statistical Studies," 1937; "The Science of Social Adjustment," 1937; "We Live & Learn," 1937; "Christianity & Economics," 1939.

Appreciations

THE RAILWAY GAZETTE has received the following appreciations from Sir Guy Granet, a Director and former Chairman of the L.M,S.R., and from the four Vice-Presidents of the Executive Committee.

FROM SIR GUY GRANET:

Lord Stamp from the time when he joined the L.M.S.R. till his tragic death revealed his genius to his colleagues and the staff in an ever increasing degree.

He was a rare and endearing personality. His mental equipment was pre-eminent and was always at the service of the company to its great benefit, the extent of which has not yet been realised. But it was the sweetness and nobility of his character, his accessibility, his capacity for work, and his almost uncanny power of understanding what was in a man and his power of drawing it out of him, that impressed me more than anything as a manager, and organiser, and leader.

Some people misjudged him owing to the variety of subjects on which he was able to write and speak; I can only say that I have never seen a railway manager or chairman give up so many hours to the daily service of his company.

The serenity of his temper and his ever present sense of humour made all the wheels of the machine work more sweetly and easily.

It would be easy to write columns about him, but in this hurried appreciation I can only conclude by saying that we all of us knew him not only as a genius but as a leader and a friend and in his personal character as an example for all of us to try to follow.

FROM SIR WILLIAM WOOD:

The death of Lord Stamp in the prime of his life is truly an irreparable loss to his colleagues on the L.M.S. Railway. To him every employee of the company was a colleague and in his systematic visits without formality to all parts of the system he not only acquired and retained a close knowledge of local conditions but made a host of friends in all grades of the service. Each of them gained by contact with him and by the example he set in his courageous and cheerful outlook on the many difficult problems of recent years.

What he did to create the L.M.S. Railway as a single and closely integrated machine can hardly be fully appreciated by those outside the company's ranks, but a permanent monument to his memory will be the efficiency of that railway and its equipment for the essential national purpose of the present hour. It was not improvisation. The root of it was scientific analysis of all the relevant facts and figures and then long-term planning, best illustrated perhaps by the comprehensive study of locomotive requirements from the point of design, lay-out of shops and motive power depots, down to the actual user for traction. All this was with one object: to achieve the maximum efficiency at the minimum cost. The mere statistical analysis for this tremendous programme cost some £20,000 per annum and Lord Stamp had the satisfaction of seeing it repaid fifty times over.

To those left behind to continue his work, his methods will be their guide but, alas, his personal touch, his wide knowledge and his colossal energy are gone.

Lady Stamp has passed with him. She would not have wished otherwise. Her help to him throughout his life he referred to often in public and in private conversation and she was associated with him in many of the social contacts which he fostered through the various staff organisations of the company. She also will be a great loss and will leave a gap which cannot be filled.

FROM SIR HAROLD HARTLEY:

Many must have wondered how Lord Stamp could control the great organisation of the L.M.S.R., and keep that intimate knowledge of its problems and its personnel which sometimes astonished even his colleagues, while he was doing far more than one man's work in a dozen other fields. His vitality, his enthusiasm, his imagination, and his constructive use of his leisure are only part of the answer. The secret of his tremendous power of achievement was his amazing brain. He had led a crowded life, he was a keen observer, he read widely at immense speed, and his mind was always active, yet his brain seemed to register and classify all that he saw, read, or thought, and at the appropriate moment years later would throw up just the fact, the quotation, or the idea he needed. The range and availability of his knowledge were unique.

So, too, in dealing with the most complex problems, the facts were sorted into the superfluous, the relevant, and the decisive incredibly quickly, and it was the rapidity of his analysis and the equally rapid expression of the result in lucid and compelling words that made possible his giant output of work. Lord Stamp's brain was a marvellous machine, but its mainspring was his interest in all that concerned the well-being and progress of humanity. It was his human touch that made him such a great leader. His encouragement and support, his inspiration, his sympathy, and his patience with human frailty and error were unfailing. He took everyone at his best, and they gave him of their best in return.

FROM SIR ERNEST LEMON:

My association with the late Lord Stamp extended over a period of about fifteen years.

To get a proper perspective of his work one must go back to the amalgamation of the British railways in 1923, when such important companies as the L. & N.W., Midland, L. & Y., and Caledonian and others became what is now the L.M.S.R. Company. Mere amalgamation of a number of undertakings is comparatively simple, but to fuse them into a living organisation is quite another matter, more particularly as those railways were staffed by men of strong loyalties to their own companies, with distinct traditions and outlook, and Lord Stamp's greatest work, in my opinion, was when he succeeded in creating out of that mixture a loyalty to the new L.M.S.R.

I would emphasise, too, how in sanctioning the enormous new equipment in order to obtain more efficient working, he realised more fully than many of us that the spirit of the undertaking was of far greater importance than the material means for working it. He will go down in history as a great railwayman, and as a very kindly chief, who, by tact, understanding and a great knowledge of human nature, got the best out of everyone with whom he came in contact.

His mind was always open to the impact of new ideas and a frequent remark was "we cannot afford *not* to try that." His gift of turning out phrases which stuck in people's minds was amazing, and one which remained with me was when on one occasion I went to him with a scheme, which comprised an entirely new outlook in technique, and which I wanted to have adopted, he turned to me and said "as long as 95 per cent. of your white elephants turn out to be black ones, I don't mind."

His utilisation of modern publicity technique was with the same end in view, to achieve co-operative support from all members of the staff, and through the medium of staff newspapers, talking films, etc., he got his messages over in understandable form throughout the L.M.S. organisation.

His personality did not show itself in unnecessary forcefulness of character; he had the happy gift of cheerfulness and imperturbability under the most difficult conditions.

A great chief and a great loss.

FROM MR. ASHTON DAVIES:

Ten years ago, when Lord Stamp said that "having the most facts in your head was the royal road to intelligence," there were some who disbelieved. But if it may be assumed that Lord Stamp acted in conformity with his theory, and that the surest proof of a theory is in its application, then there is no longer even the little room for doubt that the sceptics found in those days. For in 1935 the highest rank in the civil division of the Order of the Bath was conferred upon him—an honour previously reserved for Ambassadors and persons in direct

service of the Crown; and since then he advanced still further through the stages of dignity, from *Punch* to the Peerage. To me, personally, both when I was Chief Commercial Manager of the L.M.S.R., and after I became Vice-President, his supreme quality of leadership was in no way less valuable than the splendid co-operation of my staff—and indeed I can offer no higher praise, no deeper gratitude than this comparison. Lord Stamp's intelligence and understanding transcended the bounds of personality, and were communicated to all those who encountered him. He inspired us all.

Funeral and Memorials

The funeral service for Lord and Lady Stamp and their eldest son, the Hon. Wilfrid Stamp, was held on April 21 at Beckenham Methodist Church. The Rev. C. G. Danbury and the Rev. L. S. Shutter officiated. The Chancellor of the Exchequer was represented by Sir Edward Campbell, M.P., and the Minister of Health by Mrs. Ernest Brown. In addition to members of the family, those present included:—

Sir William Wood, Sir Harold Hartley, Sir Ernest Lemon, and Mr. Ashton Davies (Vice-Presidents, L.M.S.R.), Mr. G. R. Smith (representing Sir Thomas Royden and Sir Thomas Brocklebank), Miss Ethel Smith (private secretary), Mr. and Mrs. T. H. Baker (personal assistants to Lord Stamp), Mr. Montagu Norman, and Sir Leonard Browett (Permanent Secretary, Ministry of Transport).

The burial took place at Elmers End Cemetery.

On Wednesday (April 23) a memorial service was held in Westminster Abbey, and others were held at the principal points on the L.M.S.R. system.

Lady Stamp

The tragedy which has overtaken the house of Stamp will affect readers of THE RAILWAY GAZETTE chiefly in the death of the head of the house, Lord Stamp. It would, however, be unfair not to make at least a brief mention of his wife, Lady Stamp, who was a good partner in the truest sense of the word. She was a Justice of the Peace for Kent and had been a Member of the Bench at Bromley since 1936. She took these duties very seriously and was eager to afford every opportunity to offenders to make a new start, and to take any trifle into consideration in investigation of an offence. She was also an ex-President of the National Free Church Women's Council. Lady Stamp, although leading such a busy life, managed to share many of her husband's interests. When Sir Josiah Stamp (as he then was) became President of the Railway Convalescent Homes, Lady Stamp made it her pleasure to inspect the homes individually and was able to make many useful and practical suggestions. These included such items as improved cooking arrangements, new furniture, and new mattresses for nearly every bed. She also suggested that in one of the homes the wives of the railwaymen might be allowed to take their babies. This was put into effect and was greatly appreciated by the mothers and fathers—and probably the babies too! At the London & Birmingham Railway Centenary Banquet held in November, 1938, at which H.R.H. the Duke of Gloucester was the principal guest, many will recall the grace with which Lady Stamp took the role of hostess. She accompanied her husband on many of his trips overseas, and must have been a great source of comfort and inspiration to him. Of them it can be truly said "They were lovely and pleasant in their lives, and in their death they were not divided."

Railway and Other Reports

Birmingham & Midland Motor Omnibus Co. Ltd.—The report of this company, which is jointly controlled by the L.M.S. and G.W. Railway Companies and by the British Electric Traction Co. Ltd., shows that the balance of the profit and loss account for the year 1940 amounted to £317,880, compared with £318,951 for 1939. After deducting £60,000 (against £50,000) placed to reserve, and adding £111,049 brought forward, there is a sum available of £368,929 (against £345,049), out of which it is proposed to apply £10,000 to employees' assistance fund, £8,000 to preference dividend, £144,000 to dividend of 10 per cent. for the year on the ordinary shares, and £72,000 to a bonus of 5 per cent. on those shares, leaving £134,929 to be carried forward.

Pinchin Johnson & Co. Ltd.—For the year the net profit was £330,347, against £355,547 for the previous year. The final dividend is 6 per cent., making 8½ per cent. for the year, compared with 10 per cent.

Vulcan Foundry Limited.—Ordinary dividend for 1940 is 3 per cent. (against 5 per cent.). Net profit is £147,528, less £118,000 for taxation. For 1939 net balance was £104,172, before £56,000 for tax. Carry forward is £26,531 against £27,356.

Ransomes & Rapier Limited.—Net profit for the year 1940 after providing for maintenance of buildings and plant, depreciation, and taxation, amounted to £17,592 compared with £22,503. The final dividend on the ordinary shares is 3 per cent., tax free, making 6 per cent., tax free, for the year 1940, against 6½ per cent. for 1939.

American Locomotive Company.—The net profit of the company and its subsidiaries in 1940, after providing for charges and taxation, amounted to $2,850,813, compared with the loss of $950,376 in 1939. The profit is equal to 50 cents a share on the common stock after deducting preferred dividend requirements for the year only. Unfilled orders at the end of 1940 totalled $138,300,000, or more than ten times the amount of business on hand at the end of 1939.

Notes and News

Argentine Railway Charges.—It is reported that the British-owned railway companies have reminded the Argentine Government of their application for a 5 per cent. increase in charges.

Lundy & Atlantic Coasts Air Lines Limited.—The name of this company was changed on March 6 to Atlantic Coasts Air Lines Limited. The address is 119, Finsbury Pavement, London, E.C.2.

Shanghai-Nanking Railway.—The Hong Kong & Shanghai Banking Corporation gives notice that bonds for £116,000 of the Chinese Imperial Railway 5 per cent. Gold Loan (Shanghai-Nanking Railway) were drawn on April 1 and will become due for redemption at par on June 1, 1941.

North Western Air Transport Limited.—Notice was given in *The London Gazette* of April 15 that creditors of this company should send particulars of their debts or claims before April 30 to Mr. Samuel Woodyer, the Liquidator, at 309, India Buildings, Water Street, Liverpool. All creditors have been or will be paid in full.

Extension of Export Control.—Under a Board of Trade Order which comes into force on April 30, goods classified "C" in the export control list will require licences for export to China, Macao, Portuguese Timor, and Thailand. The Order (S.R. & O. 1941, No. 523) also prohibits the export without licence to all destinations of certain textile machinery and plant.

Compagnia Italiana Turismo (C.I.T. England) Limited.—The petition for winding-up of the company will be heard at the Royal Courts of Justice, Strand, London, on April 28. Any person who intends to appear must in writing inform Messrs. Allen & Sons, 17, Carlisle Street, Soho Square, London, W.1, of his intention to do so not later than 1 p.m. on April 26.

Requisitioning of United States Securities.—Among 164 United States securities held by British residents, which have been requisitioned by the Treasury under a vesting order, are the common shares of several railway and similar undertakings. They include the American Locomotive Company, Baltimore & Ohio Railroad, Illinois Central Railroad, and the Southern Railway (U.S.A.).

Manchester Ship Canal Charges.—The Manchester Ship Canal Company gives notice that arising out of the altered arrangements for the employment of registered dock workers provided for under the Ministry of Transport's scheme for dock labour in Merseyside, Manchester, and Preston areas, the current schedules of charges for labour and other services performed for shipowners, importers and exporters at Runcorn Docks will cease to operate after April 30. New schedules of charges will come into force on and from May 1.

TRANSPORT SERVICES AND THE WAR—87

British bombing policy—The Continental summer timetable—Railway tunnel shelter in Istanbul—Strategic railways in Iran and Australia

On Wednesday night of last week (April 16-17) London was subjected to a German air raid of particular intensity, alleged by German radio announcements to be in reprisal for the heavy R.A.F. air raid on Berlin of a week earlier (April 9-10). On the Thursday morning roads were blocked by debris, especially in the central area, and some were closed because of burning buildings, with the result that traffic was delayed. Various suburban railway services were temporarily suspended. Many of the roads were reopened as the day progressed, and rail services restored, and traffic was considerably improved in time for the evening peak.

British Bombing Policy

The following announcement was issued from 10, Downing Street on the evening of April 18:—

"In view of the German threats to bomb Athens and Cairo, his Majesty's Government wish it to be understood that if either of these two cities is molested they will commence a systematic bombing of Rome. Once this has begun, it will continue as convenient to the end of the war. The greatest care will be taken not to bomb the Vatican City, and the strictest orders to that effect have been issued. It has, however, come to the knowledge of his Majesty's Government that an Italian squadron is being held ready in Rome to drop captured British bombs upon the Vatican City should a British raid take place. It is therefore necessary to expose this characteristic trick beforehand.

"It is a mistake to describe the bombing of Berlin last night (April 17-18) by the R.A.F. as a reprisal for the raid on London the night before. It is not a reprisal but part of the regular policy adopted by the R.A.F., under instructions of the Government, of the bombing of objectives in the two guilty countries which are most likely to weaken their military or industrial capacity. This policy will be continued to the end of the war, it is hoped on an ever-increasing scale, irrespective of whether any further attacks are made on the British Islands or not."

Women as L.M.S.R. Train Announcers

L.M.S.R. women train announcers will shortly be heard at Euston station. Three members of the Euston enquiry bureau, who have passed exhaustive microphone tests have been selected because they have a good knowledge of train services. They will announce the departure of trains, together with any special last minute instructions it may be necessary to issue to travellers.

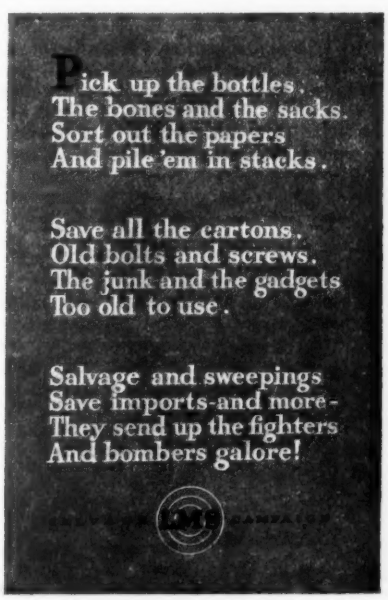
Addressing of Railway Merchandise

The Minister of Transport has made the Railways (Addressing of Merchandise) Order, 1941 (S.R. & O. No. 444). The effect is that railway companies, as from March 25, the date of the Order, are released from the obligation to accept articles or packages for conveyance to a number of specified areas unless the address of the consignee on the consignment note (and elsewhere wherever the consignee's address is required under the standard terms and conditions of carriage) includes the number, or letter and number, as the case may be, of the postal district in which the consignee's premises are situated. The specified areas are: Birmingham, Brighton, Bristol, Edinburgh, Gateshead, Glasgow, Hove, Leeds, Liverpool, London, Manchester, Newcastle-on-Tyne, Salford, and Sheffield.

Railway-Owned Canal Charges

As was recorded at page 458 of THE RAILWAY GAZETTE of April 18, the Minister of Transport on March 25 signed the Railway-Owned Canals (Increase of Charges) Order, 1941, (S.R. & O. No. 448). The Order provides that, notwithstanding any obligation or limitation imposed upon it by or by virtue of any Act or other instrument determining its functions, each of the railway companies mentioned in a schedule may increase by an amount not exceeding 16⅔ per cent. the tolls, dues, charges in respect of wharfage or cranage, tugging charges, and empty boat charges lawfully levied by it and in operation at the date of the Order in respect of the canals and navigations specified opposite its name in the schedule. If

WHAT HAVE YOU SALVAGED TO-DAY ?



Three new posters issued by the L.M.S.R. to assist its salvage campaign

any increased toll due or charge made in pursuance of the Order includes a fraction of 1d., the fraction if less than ½d. shall not be charged, otherwise it shall be charged as 1d. The schedule is as follows :—

Railway Company	Canal or Navigation
London Midland & Scottish Railway Company	Ashby-de-la-Zouche Canal
	Cromford Canal
	Huddersfield Canal
	Lancaster (North End) Canal
	Manchester Bolton & Bury Canal
	St. Helens Canal
	Trent & Mersey Navigation
	Shropshire Union (Coalport Branch) Canal
	Ulverston Canal
	Shropshire Union Canal
	Forth & Clyde Canal
	Monkland Canal
London & North Eastern Railway Company	Ashton Canal
	Borobridge & Ripon Canal
	Chesterfield Canal
	Foss Dyke Navigation
	Macclesfield Canal
	Peak Forest Canal
	Witham Navigation
	Edinburgh & Glasgow Union Canal
Great Western Railway Company	Brecon & Abergavenny Canal
	Monmouthshire Canal
	River Kennet Navigation
	Kennet & Avon Canal
	River Avon Navigation
	Bridgwater & Taunton Canal
	River Tone Navigation
	Grand Western Canal
	Stourbridge Extension Canal
	Stratford-upon-Avon Canal
	Swansea Canal (including the Trewyddfah Canal)
Southern Railway Company	Thames & Medway Canal
West London Extension Railway Company...	Kensington Canal

The Continental Summer Timetable

The Reichsbahn has announced that a number of new through passenger trains will be run between the occupied territories in France and the Low Countries and Germany from May 5, the date of the introduction of the summer timetables. A timetable conference, held in Paris recently, was attended by Reichsbahn and *Wehrmacht*, and French, Belgian, and Dutch railway representatives. The improved services were stated to have been made possible by the repair of the main line sections between Reims—Mezieres and between Liége and Aachen. The new through expresses announced are :—

1. Paris—Brussels—Antwerp—The Hague—Amsterdam, on the normal peacetime route.
2. Paris—Metz—Saarbrucken—Frankfort—Leipzig—Berlin, by the normal Est route. This train and the return train will connect at Paris with the through trains from Hendaye on the Spanish frontier. Through carriages between Hendaye and Berlin will be run, and the journey time from Madrid to Berlin will be reduced to 50 hr. from the present time of 56 hr.
3. Paris—Reims—Mezieres—Longwy—Luxembourg, along the normal peacetime route. There are to be connections at Mezieres to and from north-west France, and at Luxembourg to and from Trier and north and south Germany.
4. Paris—Nancy—Karlsruhe—Vienna.
5. Dijon—Strasbourg—Karsruhe, whence connections will be available to all parts of north and south Germany.

In addition, existing Paris—Berlin services and all trains between Brussels and Cologne will be accelerated, as they will no longer have to use the route through Dutch territory *via* Maastricht. The existing Brussels—Cologne train will be extended from and to Lille, and the Cologne—Vienna express extended from and to Brussels. It is understood that these improved services are being introduced primarily for members of German Forces on leave, but the trains are to be available to the public.

Summer Time

It has been announced by Germany that summer time will be introduced in Slovakia and Hungary on May 5 ; in Germany and occupied territories in the west, summer time has been in force throughout the winter.

The Manx Government recently decided not to adopt the extra hour of summer time which is being introduced in Great Britain. This action raised such a storm of protest in the island that the Governor on April 18 called a special sitting of the Legislature, which rejected a motion supporting the Government, so that the island will adopt the English plan.

Jugoslavia

A German official statement said that the remnant of the Jugoslav Armed Forces capitulated on the evening of April 17, and that fighting in that country ceased at noon on April 18. On the latter date the Board of Trade and the Ministry of Economic Warfare announced that Jugoslavia is to be regarded as enemy-occupied territory for the purposes of the Trading with the Enemy Act and of the blockade. It is accordingly a punishable offence to have commercial, financial, or other intercourse or dealings with or for the benefit of any person in that territory. As from April 18, moreover, Jugoslavia is regarded as an enemy destination for contraband purposes, and all goods of Jugoslav origin or ownership are liable to seizure.

Istanbul Underground as Air Raid Shelter

For more than 65 years the old capital of the Turkish Empire has been served by an underground railway of which comparatively little is generally known in Great Britain, although the original capital was raised here. Now, the line has come into prominence once again as it has become known that the tunnel is being adapted for use as an air raid shelter. The concession for this line, which was the first (and remains the only) urban underground railway in Turkey, was granted by the Imperial Ottoman Government to a Monsieur Gavaud for a term of 42 years. A company known as the Metropolitan Railway of Constantinople, from Galata to Pera, Limited was formed in England on June 22, 1872, and the line was opened with considerable ceremony on Sunday, January 17, 1875. As indicated by the title, the railway extends from the shipping and commercial quarter of Galata, the lower terminus, to the residential area of Pera. This line is very short, the total length of the tunnel being but 634 yd. and the rails 672 yd. The difference in level between the extremities is 200 ft., the average gradient 1 in 10, and the greatest depth of the tunnel beneath the surface 80 ft. It was at one time intended to extend the railway from Galata, under the Golden Horn, to Stamboul, but this was never undertaken. The line is double track and is cable operated, with the cars balancing one another.

Progress with the Teheran—Tabriz Railway

The railway running north-west from Teheran towards Tabriz was opened as far as Zinjan—a town in Azerbaijan some 315 km. (196 miles) from Teheran—on October 4, 1940. Zinjan is almost halfway between Teheran and Tabriz. The first section of this line, from Teheran to Karedj, was completed in September, 1939, and the second section, to Kazvin, in March, 1940. At that time it was not expected that the section to Zinjan could be finished before January, 1941, but by laying an average of 800 metres (875 yd.) of rails a day it was found possible to advance the date by about three months. As in the case of the earlier sections, the line to Zinjan was built by the Iranian Ministry of Communications through contractors for separate sections, under the supervision of foreign and native engineers. According to Dr. Sadjadi, Minister of Communications, who inaugurated the line on behalf of the Shah, 3,500 tons of rails were used and the cost of materials alone amounted to 60,000,000 rials. No figures for the total cost per km. are available. The highest point on the line is at Pir Zagueh (5,900 ft.), 2,000 ft. higher than Teheran. However, the rise is very gradual, and no severe engineering difficulties were encountered. The remainder of the line to Tabriz involves much more difficult construction. Earlier references to this important strategic line were made in our issues of April 12. 1940 (page 558), and November 15, 1940 (page 527).

Proposed Strategic Railway in Australia

In Australia the value of railway communications is not being overlooked by the military authorities, as a proposal to construct a standard-gauge line linking Broken Hill and Port Pirie is at present under consideration by the Federal Emergency Transport Committee. The advantage of this work will be appreciated, as it will facilitate the rapid movement of raw materials, munitions, and troops, and eliminate transhipment delays in Victoria. This project, which would shorten the distance between the Eastern and Western States by approximately 252 miles, entails laying a third rail over the 254 miles from Broken Hill to Port Pirie, or alternatively, the construction of a new standard-gauge line.

Staff & Labour Matters

Awards for Gallantry

The George Medal has been awarded to Ernest Price, Garage Fitter, London Passenger Transport Board, along with another man named Hollingdale. A high explosive bomb demolished a dwelling house and people were trapped. Hollingdale and Price entered the building and, although there was an escape of coal gas, succeeded in rescuing two women. By that time they were themselves almost overcome by the gas. They were warned not to go in again, but despite this they re-entered the building and brought out another woman. The two men then made a third attempt but had to be removed to the open air.

Hollingdale and Price showed utter disregard of danger to themselves both from the gas and the falling debris. Their bravery and devotion to duty were outstanding.

The Medal of the Civil Division of the Most Excellent Order of the British Empire for meritorious service has been awarded to Alfred Hobdell, carter; Henry Hobdell, stableman; and Arthur Alfred Paxton, carter, employed by the London Midland & Scottish Railway Company. When stables were set on fire by enemy action, volunteers were called for to rescue the horses. Many were taken to safety but a check being made it was found that seven animals were unaccounted for. A. Hobdell, Paxton and H. Hobdell volunteered to search the stables. They were advised not to enter the building, but went in, brought out the horses and transferred them to other stables.

The following have been commended for brave conduct in civil defence :—

William Hofton, Head Office messenger, L.M.S.R., Manchester.

Charles Payne, fitter, L.M.S.R.

Herbert George Thomas, special constable, L.M.S.R.

Reserved Occupations

The new Schedule of Reserved Occupations & Protected Work which has been issued by the Ministry of Labour has a double object—of increasing the number of men in the Fighting Forces and increasing the number of men engaged on civilian work of national importance. A man under the new schedule losing his present reservation can serve the country either by joining the forces or by transferring to reserved work if he gets the chance. The changes proposed by the new schedule will take place in three stages :—

A.—Under which men may be called to join their units at any time after June 1.

B.—Under which they will not be required to join their units till July 15—and, may be, some time after.

C.—Under which they will not, as far as can be foreseen, be required to join their units before October 1.

The announcement of these changes in advance is intended to give time both for adjusting industries to the loss of men and for the transfer of men from unimportant to important civilian employment in which they will become or remain reserved. Such transfers may be of two kinds :—

First, there may be transfer from an occupation with a higher age of reservation or no reservation at all to an occupation with a lower age of reservation.

Second, there may be transfer from unprotected to protected work in the same occupation.

The new schedule introduces a new principle of "protected work." Whereas hitherto there has been a single age of reservation in each occupation, in future in many occupations there will be two ages—a lower age for a man of such an occupation engaged on work which is "protected" because of its importance to the war effort, and a higher age for a man of such an occupation engaged on "unprotected work." Men between these two ages will be reserved if they are on protected work and will be available for service if they are on unprotected work. In accordance with this change of principle the schedule itself has a new name and in place of being a "Schedule of Reserved Occupations" is a "Schedule of Reserved Occupations & Protected Work." For the administration of this new scheme the Ministry of Labour and National Service will form a "Register of Protected Establishments" on applications to be made by the employers. Admission of an establishment to the Register of Protected Establishments will not mean that all the men in that establishment are reserved but that they have the benefit of a lower age of reservation.

The classes of establishments which the Minister is prepared in the first instance to consider for inclusion in the register are set out in the second part of the schedule. They are arranged in five groups. The first group is large and miscellaneous and includes the mining of coal and ferrous and non-ferrous metals; metal manufacture, shipbuilding, agricultural machinery manufacture, coke-oven operation, public utilities, petroleum refining, shipping, and railway, dock and harbour and canal services, and a variety of other essential trades. The second group comprises establishments or branches of establishments wholly or mainly engaged on Government work. The third comprises road transport undertakings and establishments engaged in the maintenance and repair of essential motor vehicles if they are themselves of national importance. The Minister of Labour will decide this point after consultation with the Minister of Transport. Group 4 comprises works of building or construction of classes certified as of national importance by the Minister of Labour after consultation with the Minister of Works and Buildings. Group 5 comprises establishments fulfilling conditions prescribed by the Board of Trade for concentration of production. Applications for immediate admission to the register, except in groups 4 and 5, must be returned by April 30.

The ages of reservation of men engaged in rail transport are as follows :—

Occupation	Stage A	Stage B	Stage C	Remarks
Railway clerk	30	35	NR	—
Railway official (including Assistant)				
Manager, superintendent...	25	—	—	—
Stationmaster	25	—	—	ST
Yardmaster	25	—	—	—
Inspector	25	—	—	—
Relief stationmaster ...	25	—	—	ST
Agent	25	—	—	—
Traffic control staff ...	25	—	—	ST
Relief control staff ...	25	—	—	ST
Other executive official (not specified above) ...	25	—	—	—
Railway engine driver, motorman, fireman, engine shed worker.				
Shed foreman, shed chargeman (locomotive), running shed foreman ...	25	—	—	SF
Engine driver, locomotive driver (electric and steam)	25	—	—	ST
Engine driver, locomotive driver (steam)	25	—	—	ST
Fireman (locomotive)(qualified driver)	25	—	—	ST
Motorman (electric) ...	25	—	—	—
Engine driver (internal-combustion engine) ...	25	—	—	ST
Engine driver (narrow-gauge railway)	25	—	—	—
Fireman (locomotive) ...	25	—	—	ST
Engine cleaner (qualified fireman)	25	—	—	ST
Engine cleaner	25	—	—	—
Other engine shed workers (excluding labourers) ...	25	—	—	—
Signal lineman, platelayer (permanent way staff) (railway)				
Chief lineman	25	—	—	ST
Signal and/or telegraph lineman, assistant signal and/or telegraph lineman	18	—	—	—
Ganger, sub-ganger ...	25	—	—	ST
Platelayer, lengthman, relayer, patrolman ...	25	—	—	ST
Wireman (railway) ...	25	—	—	ST
Fixer (signals)	25	—	—	ST
Permanent way (including engineering) maintenance and repair man ...	25	—	—	—
Signal and telegraph maintenance and repair man	23	—	—	ST
Railway porter, goods checker				
Working foreman, leading porter, station foreman, parcel foreman, chargeman	25	30	—	SF
Goods checker	30	35	NR	ST
Caller off, numbertaker ...	30	35	NR	—
Goods yard porter ...	30	35	NR	—
Tracer, officeman, scaleman, weighbridge man...	30	35	NR	—
Station porter, carriage, station, signal lamp man	30	35	NR	—
Loader	30	35	NR	—
Sheeter, roper	30	35	NR	—
Porter (qualified signal man)	25	—	—	ST
Porter (qualified guard) ...	25	—	—	ST
Porter (qualified shunter)	25	—	—	ST
Porter (qualified goods checker)	30	35	NR	ST
Other railway workers				
Foreman, chargeman ...	F	F	F	SF
Ticker collector, ticket examiner, excess luggage collector	30	—	NR	—
Guard, porter-guard, conductor, train attendant, brakesman, inclineman...	25	—	—	ST
Train, carriage, wagon, brake, etc., examiner ...	25	30	—	—
Signalman, porter-signalman	25	—	—	ST
Traffic regulator	25	—	—	ST
Pointsman	25	30	—	ST
Capstanman	25	—	—	—
Shunter, latcher (mines, quarries)	25	—	—	ST
Spragger	25	—	—	—
Crossing keeper, level crossing man, gateman (level crossing) ...	30	35	—	—
Chain horse driver, shunt horse driver	30	35	—	—
Cleaner (carriage, wagon, etc.) (qualified train, carriage, wagon brake, examiner)	25	30	NR	—

NR = Not reserved.
ST = To be called up for service in trade capacity only.
SF = Position in regard to volunteering or to recruitment in trade capacity is that appropriate to occupation of tradesman.
F = Age of reservation is that appropriate to occupation of tradesman.

RAILWAY AND OTHER MEETINGS

Rohilkund & Kumaon Railway Co. Ltd.

The ordinary general meeting of the Rohilkund & Kumaon Railway Co. Ltd. was held at the registered offices of the company, 237, Gresham House, Old Broad Street, London, E.C.2, on April 17. Lt.-Colonel T. Gracey, R.E., Chairman of the company, presided.

The Secretary, Sir James Williamson, read the notice convening the meeting and the report of the auditors.

The Chairman's statement which had been circulated with the report and accounts was as follows :—

Owing to the delay in getting complete accounts from India, it was not possible to hold this meeting at the usual time. But the board had sufficient figures in January last to estimate what further dividend could safely be paid and, in order that shareholders might receive the dividend at the usual time, it exercised its powers under the articles of association by declaring a second interim dividend, which was paid on January 25. The board does not recommend the payment of any further dividend for the year, and consequently that second interim dividend becomes, in effect, a final dividend.

You will notice that the accounts are presented in a much abbreviated form, the details of traffic and working expenses having been omitted to save expense and paper, but all information essential to inform the shareholders as to the progress of the railway has been retained in the report submitted. As mentioned in the report, full accounts as compiled in India are available for the inspection of members at any time at the company's offices.

I am not enlarging as usual on the accounts, but summarising, the year has been a good one financially for the company, traffic both coaching and goods has shown a satisfactory increase both in quantity and in earnings, which have been helped by the supplementary charge on almost all traffic, which had been ordered by the Indian Government in March, 1940. We have managed to maintain our full dividend of 16 per cent. without drawing on the interest accruing from our reserve fund.

The increase in working expenses is mainly due to replacing permanent way on certain sections with heavier material ; the renewal of locomotives and coaching stock ; and the appointment of additional staff to comply with the Hours of Employment Regulations.

The Government of India has been asked to agree to a renewals suspense fund being started in India as in the last war, to which sums will be allotted for works such as renewals of works, locomotives and rolling stock which cannot be carried out owing to the war. Rainfall was normal and well distributed throughout the monsoon and there was little damage done by floods.

We are still having the usual difficulties with ticketless travellers. They do not, however, appear to be increasing and it is satisfactory to know that legislation is being introduced which will greatly strengthen the hands of railways in dealing with offenders.

The Government has introduced a wagon pool for metre-gauge railways during the year on the same lines as those already in force for the broad-gauge railways in India. The experience gained from six months working of the pool appears to be satisfactory, showing material reduction in train mileage compared with traffic carried, but the period for which it has been in force is too short to show whether it will be successful, when its disadvantages in complication of maintenance etc., are taken into consideration.

Traffic prospects are good on the whole in spite of much confusion having been caused in the sugar trade through the injudicious control of this important agricultural and manufacturing industry, imposed by the late Congress Ministries.

Road motor competition is still active on certain sections, but a point appears to have been reached when it is not making fresh inroads into our traffic. The railway has been helped by the rise in the prices of petrol and motor parts, and it is noticeable that the control exercised in respect of overcrowding of buses has improved. The war has overshadowed us like all other businesses, we have had great delay in our mails and trouble in getting supplies from outside India. A donation of £100 has been made to the Lord Mayor's London Air Raid Distress Fund.

I wish to convey our hearty thanks to the Agent and staff in India for the excellent work they have done throughout the year and to our staff in London who had to carry on all through the troubles of the last winter and I wish especially to thank them for the very brave and loyal way they have carried through the last six months.

I expect that I shall be asked whether the Government of India is going to buy us out in 1942 ; frankly, I do not know, and can only say the board has not been approached in any way. Should the company's property, however, be acquired in 1942, it is estimated that the purchase price calculated in accordance with the terms of the contracts will give a return of about 250 per cent. to the ordinary stockholders. To this figure must be added the value of the company's reserves, whatever this may be at the time of realisation.

The chairman concluded by moving the adoption of the report, which was carried unanimously.

The retiring directors were re-elected and, the auditors having been re-appointed, the proceedings terminated with a vote of thanks to the chairman, directors, agents, and staff at home and abroad.

Bengal & North Western Railway Co. Ltd.

The ordinary general meeting of the Bengal & North Western Railway Co. Ltd. was held at the registered offices of the company, 237, Gresham House, Old Broad Street, London, E.C.2, on April 17. Lt.-Colonel T. Gracey, R.E., Chairman of the company, presided.

The Managing Director, Sir James Williamson, read the notice convening the meeting and the report of the auditors.

The Chairman's statement, which had been circulated with the report and accounts, was as follows :—

Owing to the delay in getting complete accounts from India, it was not possible to hold this meeting at the usual time. But the board had sufficient figures in January last to estimate what further dividend could safely be paid and, in order that shareholders might receive the dividend at the usual time, it exercised its powers under the articles of association by declaring a second interim dividend, which was paid on February 1. The board does not recommend the payment of any further dividend for the year, and consequently that second interim dividend becomes, in effect, a final dividend.

You will notice that the accounts are presented in a much abbreviated form, the details of traffics and working expenses having been omitted to save expense and paper, but all information essential to inform the shareholders as to the progress of the railway has been retained in the report submitted. As mentioned in the report, full accounts as compiled in India are available for the inspection of members at any time at the company's offices.

I am not enlarging as usual on the accounts, but summarising ; the year has been a good one financially for the company ; traffic both coaching and goods have shown a satisfactory increase both in quantity and in earnings, which have been helped by the supplementary charge on almost all traffic, which had been ordered by the Indian Government in March, 1940.

We have managed to maintain our dividend of 16 per cent. without drawing on the interest accruing from our reserve fund, and the carry forward has been only reduced by £4,490. This in spite of making a considerable payment out of revenue to the raising, doubling, and bridging of the main line between Sonepore and Chupra which is a non-recurring expense. It is expected that this work will be completed and open to traffic by May.

The Government of India has been asked to agree to a renewals suspense fund being started in India as in the last war, to which sums will be allotted for works such as renewals of works, locomotives and rolling stock which cannot be carried out owing to the war.

We are still having the usual difficul-

OFFICIAL NOTICES

Sudan Government

SUDAN RAILWAYS require the services of an ASSISTANT ENGINEER. Age 25–28 years, preferably unmarried. Physical fitness, personality and potential aptitude for control of staff. All this being equal, men of 5 ft. 10 in. to 6 ft. are preferred. Candidates must have passed the Examination for Associate Membership of the Institution of Civil Engineers or hold an Engineering Degree recognised as granting exemption from Sections "A" and "B" of the A.M.I.C.E. Examination. Previous experience on British or other Railways is desirable, but not necessarily essential.

Starting rate of pay £E.480–£E.540 per annum (£E.1 = £1 0s. 6d.) according to age and qualifications, with periodical increases of pay in accordance with Government Scales, viz.: £E.480–540–600–660–720–780–852–936, all increases being biennial with the exception of the last one, which is triennial. Successful candidate will be appointed on Probationary Contract for two years and subscribe to the Provident Fund, after which if accepted to serve towards pension his contribution will be transferred to the Pension Fund. Free passage on appointment. Strict medical examination.

Applications, giving full particulars as regards age, qualifications and experience, together with copies of testimonials, should be sent to the Controller, Sudan Government London Office, Oxford Hotel, 261, Clifton Drive South, Lytham St. Annes, Lancs., marking envelope "Assistant engineer."

ties with ticketless travellers. They do not, however, appear to be increasing and it is satisfactory to know that legislation is being introduced which will greatly strengthen the hands of railways in dealing with offenders.

We have been fortunate this year in having had very little flood damage, but the Kosi is still increasing its westwards swing and showing no signs of returning to its old bed. I am sorry to say that much of the land near Bhaptiahi on the eastern branch and on the Mansi Bhaptiahi branch of the Tirhut section, is being ruined for many years by the vagaries of this river, which will affect traffic on these branches for a long time. We are taking all reasonable steps to keep them open.

The Government has introduced a wagon pool for metre-gauge railways during the year on the same lines as those already in force for the broad-gauge railways in India. The experience gained from six months working of the pool appears to be satisfactory, showing material reduction in train mileage compared with traffic carried, but the period for which it has been in force is too short to show whether it will be successful, when its disadvantages in complication of maintenance, etc., are taken into consideration.

The traffic prospects for the next six months are reported to be favourable, in spite of much confusion having been caused in the sugar trade through the injudicious control of this important agricultural and manufacturing business, imposed by the late Congress Ministries.

The war has overshadowed us like all other businesses; we have had great delays in our mails, and trouble in getting supplies from outside India. At the request of the Director of Supply, the manufacture of munitions is being carried out in the company's workshops. A donation of £500 has been made to the Lord Mayor's London Air Raid Distress Fund.

I wish to convey our hearty thanks to the Agent and staff in India for the excellent work they have done throughout the year and to our staff in London, who had to carry on all through the troubles of the last winter, and I wish especially to thank them for the very brave and loyal way they have carried through the last six months.

I expect that I shall be asked whether the Government of India is going to buy us out in 1942. Frankly, I do not know, and can only say the board has not been approached in any way. Should the company's property, however, be acquired in 1942, it is estimated that the purchase price, calculated in accordance with the terms of the contracts, will give a return of about 250 per cent. to the ordinary stockholders. To this figure must be added the value of the company's reserves, whatever this may be at the time of realisation.

The chairman moved the adoption of the accounts and balance sheet.

Lt.-Colonel W. R. Izat, D.S.O., R.E., seconded the motion, which was carried.

The retiring directors were re-elected, and, the auditors having been re-appointed, the proceedings terminated with a cordial vote of thanks to the Chairman, directors, the Agent, and staffs in London and India.

Irish Traffic Returns

IRELAND		Totals for 14th Week			Totals to Date		
		1941	1940	Inc. or Dec.	1941	1940	Inc. or Dec.
		£	£	£	£	£	£
Belfast & C.D. (80 miles)	pass.	3,098	2,411	+ 687	39,027	33,580	+ 5,447
	goods	1,142	521	+ 621	15,915	7,092	+ 8,823
	total	4,240	2,932	+ 1,308	54,942	40,672	+ 14,270
Great Northern (543 miles)	pass.	14,750	9,600	+ 5,150	175,900	135,800	+ 40,100
	goods	16,950	12,600	+ 4,350	230,050	161,200	+ 68,850
	total	31,700	22,200	+ 9,500	405,950	297,000	+ 108,950
Great Southern (2,049 miles)	pass.	39,522	28,984	+ 10,538	477,430	412,740	+ 64,690
	goods	49,146	45,851	+ 3,295	706,828	607,304	+ 99,524
	total	88,668	74,835	+ 13,833	1,184,258	1,020,044	+ 164,214
L.M.S.R. (N.C.C.) (247 miles)	pass.			Returns not to hand			
	goods						
	total						

Good Friday, 1941

British and Irish Railway Stocks and Shares

Stocks	Highest 1940	Lowest 1940	Prices April 22, 1941	Rise/ Fall
G.W.R.				
Cons. Ord.	52	22¼	31	−1
5% Con. Pref. ...	103½	58	92½	—
5% Red. Pref. (1950)	105½	88	103	+1
4% Deb.	107½	90½	109½	—
4½% Deb.	108½	96½	113	—
4½% Deb.	114½	96	115½	—
5% Deb.	124	106	130	—
2½% Deb.	66½	57	66	—
5% Rt. Charge ...	117½	97	126½	−1
5% Cons. Guar. ...	117	90½	124½	—
L.M.S.R.				
Ord.	24⅞	9	11½	−½
4% Pref. (1923) ...	60½	21⅜	36½	+½
4% Pref.	70½	35	53½	—
5% Red. Pref. (1955)	94½	60	84½	—
4% Deb.	101½	81	102½	—
5% Red. Deb. (1952)	109½	102	108*	−½
4% Guar.	93½	65	92½	—
L.N.E.R.				
5% Pref. Ord. ...	8⅜	1½	2½	−⅛
Def. Ord.	4⅜	1⅜	1⅜	−⅛
4% First Pref. ...	60	20	34½	—
4% Second Pref. ...	22⅝	6½	12	—
5% Red. Pref. (1955)	80	34½	60½	—
4% First Guar. ...	86½	56	82½	—
4% Second Guar. ...	77½	37	66½	−1
3% Deb.	73½	54½	75	—
4% Deb.	97⅜	74	99½	—
5% Red. Deb. (1947)	107	96¾	104	—
4½% Sinking Fund Red. Deb.	104	98	102½	—
SOUTHERN				
Pref. Ord.	79	34	47½	—
Def. Ord.	22½	7	9½	—
5% Pref.	104½	58¾	88½	—
5% Red. Pref (1964)	105	85	100½	—
5% Guar. Pref. ...	116¾	90	124	—
5% Red. Guar. Pref. (1957)	114⅞	94	113½	—
4% Deb.	106¾	84½	107½	—
5% Deb.	122½	100	128½	—
4% Red. Deb. (1962–67)	106	96½	106	—
4% Red. Deb. (1970–80)	106¾	93	106	—
FORTH BRIDGE				
4% Deb.	95½	87	93½	—
4% Guar.	93½	81½	91½	—
L.P.T.B.				
4½% "A"	116	103	119½	—
5% "A"	121½	107	124½	—
4½% "T.F.A." ...	105½	101	102½	—
5% "B"	116	102	113½	—
"C"	65½	24	31	—
MERSEY				
Ord.	26	18½	21½	—
4% Perp. Deb. ...	92½	86¼	92½	—
3% Perp. Deb. ...	68	63	67½	—
3% Perp. Pref. ...	57	50½	53½	—
IRELAND				
BELFAST & C.D.				
Ord.	4	3	4	—
G. NORTHERN				
Ord.	4½	1½	4½	—
G. SOUTHERN				
Ord.	12½	4	7	—
Pref.	15½	6	8	—
Guar.	36	15	19½	—
Deb.	55½	40	51	—

ex dividend

Railway Stock Market

Uncertainty as to the next turn of events in the war has continued to restrict business on the Stock Exchange, but the absence of heavy selling assisted sentiment, and better demand developed for British Funds. Earlier in the week, an all-round rally in gilt-edged stocks had a beneficial influence on markets generally, and a moderate marking-up of values was in evidence. The announcement of the forthcoming requisitioning of further American dollar securities is regarded as an important market factor, because a large part of the proceeds arising therefrom will no doubt be re-invested in British Government securities. Other good class stocks of the fixed interest class will probably also come into better demand for a similar reason, and in this connection home railway prior charges may attract considerable attention. There are, in fact, indications that the latter are not in large supply in the market, and the recent decline in prices is, of course, moderate in comparison with the gains shown earlier in the year. The difficulty of assessing the outlook for junior home railway stocks, pending the revised financial agreement, must be expected to limit attention in stocks of this class; but they will no doubt move fairly closely with the general trend on the Stock Exchange, and moreover, there seems every reason to assume that the minimum revenue guarantee will be maintained. Indeed, so far as can be judged, junior railway stocks should continue to receive dividends which would show generous yields at current prices. It may be prudent to assume that future dividends may be rather lower than last year's payments, although the latter were much below the return obtained by shareholders in other concerns also playing a vital part in the war effort.

In view of indications that demand will continue to centre on investment securities, attention is being drawn in the market to the good yields obtainable on front rank railway stocks, such as Southern and Great Western debentures. It is being pointed out that L.M.S.R. 4 per cent. debentures appear to be relatively undervalued, and that the yield of over 4¾ per cent. on L.N.E.R. 4 per cent. first guaranteed is attractive. A larger return is shown on the second guaranteed stock of the last-named railway, and among preference stocks, yields on L.N.E.R. first preference and L.M.S.R. senior preference appear to be unduly large; these preference stocks are not cumulative as to dividend, but they should apparently continue to receive their full payments throughout the period of the war. Among 5 per cent. preference stocks, those of the Great Western and more particularly the Southern, also seem moderately priced; bearing in mind the extent of the cover for their dividend requirements last year, there appears no justification for the fact that they show yields well in excess of those obtainable on the preference shares of leading industrial companies.

Great Western ordinary stock improved to 32, and the 5 per cent. preference was better at 93½, and the 4 per cent. debentures were fractionally higher at 110. Southern 5 per cent. preference was unchanged at 88½, and the debentures at 107½ were also unchanged on balance; but the preferred ordinary at 46 was a point lower. L.M.S.R. ordinary became slightly better at 11¾; the 4 per cent. debentures were again 102, and the 4 per cent. guaranteed 93. L.N.E.R. first guaranteed was maintained at 82½, but the second guaranteed at 66½ was slightly lower as compared with a week ago. Following their recent small improvement, Argentine railway debentures have shown a reactionary tendency this week.

Traffic Table of Overseas and Foreign Railways Publishing Weekly Returns

	Railways	Miles open 1940-41	Week Ending	Traffic for Week: Total this year	Traffic for Week: Inc. or Dec. compared with 1940	No. of Weeks	Aggregate Traffics to Date: Totals: This Year	Aggregate Traffics to Date: Totals: Last Year	Aggregate Traffics to Date: Increase or Decrease	Shares or Stock	Prices: Highest 1940	Prices: Lowest 1940	Prices: April 22, 1941	Prices: Yield % (See Note)
				£	£		£	£	£					
South & Central America	Antofagasta (Chili) & Bolivia	834	13.4.41	19,770	+ 3,220	15	260,120	291,140	— 31,020	Ord. Stk.	11½	3½	4½	Nil
	Argentine North Eastern	753	12.4.41	ps. 138,600	— ps.20,600	41	ps. 5,980,000	ps. 6,213,800	— ps.233,800	,,	3¾	1	2	Nil
	Bolivar	174	Mar. 1941	4,340	— 30	13	11,020	11,590	— 570	6 p.c. Deb.	6½	5	6½	Nil
	Brazil	—	—	—	—	—	—	—	—	Bonds	8	5	5	Nil
	Buenos Ayres & Pacific	2,801	12.4.41	ps.1,902,000	+ps.276,000	41	ps.57,869,000	ps. 57,239,000	+ ps.630,000	Ord. Stk.	4½	1	2½	Nil
	Buenos Aires Central	190	18.1.41	$70,400	— $20,200	29	$2,477,400	$2,994,900	— $517,500	—	—	—	—	—
	Buenos Ayres Great Southern	5,082	12.4.41	ps.2,496,000	+ ps.56,000	41	ps.90,542,000	ps. 98,225,000	— ps.7,683,000	Ord. Stk.	10⅜	3	4½	Nil
	Buenos Ayres Western	1,930	12.4.41	ps. 920,000	+ ps.40,000	41	ps.31,174,000	ps. 32,513,000	— ps. 1,339,000	,,	8⅜	2	3½	Nil
	Central Argentine	3,700	12.4.41	ps.1,980,850	+ps.206,100	41	ps.64,635,250	ps. 72,982,300	— ps.8,347,050	,,	8½	2	3½	Nil
	Do.	—	—	—	—	—	—	—	—	Dfd.	4	½	1	Nil
	Cent. Uruguay of M. Video	972	12.4.41	23,825	+ 1,169	41	920,567	875,296	+ 45,271	Ord. Stk.	3½	½	1½	Nil
	Costa Rica	188	Dec. 1940	18,694	— 783	26	90,913	107,851	— 16,938	Stk.	23⅛	14	15½	12¾
	Dorada	70	Mar. 1941	12,500	+ 700	13	36,700	34,500	+ 2,200	1 Mt. Db.	99	97½	98	6 7/16
	Entre Rios	810	12.4.41	ps. 175,300	— ps. 29,700	41	ps. 8,744,200	ps. 9,855,500	— ps.1,111,300	Ord. Stk.	4	½	1½	Nil
	Great Western of Brazil	1,016	12.4.41	7,800	— 3,500	15	162,200	191,400	— 29,200	Ord. Sh.	4/-	1/-	7/16	Nil
	International of Cl. Amer.	794	Jan. 1941	$499,099	— $66,391	4	$499,099	$565,490	— $66,391	—	—	—	—	—
	Interoceanic of Mexico	—	—	—	—	—	—	—	—	1st Pref.	9d.	9d.	½	Nil
	La Guaira & Caracas	22¾	Mar. 1941	5.520	— 1,850	13	18.995	21,975	— 2,980	—	6	4	—	—
	Leopoldina	1,918	12.4.41	20,588	+ 855	15	359,892	329,324	+ 30,568	Ord. Stk.	2 7/16	½	¾	Nil
	Mexican	483	21.2.41	ps. 331,200	+ ps. 29,300	7	ps. 2,222,400	ps. 2,281,000	— ps. 58,600	,,	2/11½	15/16	⅞	Nil
	Midland of Uruguay	319	Feb. 1941	11,927	— 913	35	94,189	81,224	+ 12.965	—	—	—	—	—
	Nitrate	386	15.4.41	4,245	— 1,382	15	30,977	55,962	— 24,985	Ord. Sh.	2⅜	1½	2 3/16	5 11/16
	Paraguay Central	274	12.4. 41	$3,322,000	+ $189,000	41	$133.526,000	$131,022,000	+ $2,504,000	Pr. Li. Stk.	41	36	30½	19 11/16
	Peruvian Corporation	1,059	Mar. 1941	61.029	— 13,709	39	577,986	606,651	— 28,665	Pref.	4	1	2	Nil
	Salvador	100	8.2.41	£29,789	— £4,561	32	£435,351	£534,567	— £99,216	—	—	—	—	—
	San Paulo	153½	6.4.41	38,375	+ 5,497	14	483,750	481,382	+ 2,368	Ord. Stk.	50	23	32	7 13/32
	Taltal	160	Mar. 1941	2,630	— 375	39	25,140	23,135	+ 2,005	Ord. Sh.	15/1½	⅜	⅝	Nil
	United of Havana	1,346	12.4.41	44,433	+ 5,971	41	934,787	977,301	— 42,514	Ord. Stk.	⅜	¼	⅜	Nil
	Uruguay Northern	73	Feb. 1941	891	— 315	35	9,133	8,590	+ 543	—	—	—	—	—
Canada	Canadian National	23,637	14.4.41	1,068,910	+ 249,446	15	15,127,414	12,269,789	+ 2,857,625	—	—	—	—	—
	Canadian Northern	—	—	—	—	—	—	—	— 4 p.c.	Perp. Dbs.	86	68	89	4½
	Grand Trunk	—	—	—	—	—	—	—	—	4 p.c. Gr.	105¾	95 13/16	101½	3 13/16
	Canadian Pacific	17,153	14.4.41	769,600	+ 226,400	15	10,571,000	8,222,800	+ 2,348,200	Ord. Stk.	9 7/16	4⅞	7½	Nil
India†	Assam Bengal	1,329	30.4.41	45,187	+ 6,529	4	135,060	120,437	+ 14,623	Ord. Stk.	99⅜	71	100	3
	Barsi Light	202	10.2.41	6,457	+ 4,162	47	140,767	108,885	+ 31,882	—	—	—	—	—
	Bengal & North Western	2,086	31.3.41	264,150	— 7,291	26	1,554,747	1,468,050	+ 86,697	Ord. Stk.	283	234	299	5⅜
	Bengal Dooars & Extension	161	Sept. 1940	14,625	+ 508	26	78,405	66,243	+ 12,162	,,	—	—	—	—
	Bengal-Nagpur	3,269	31.1.41	302,400	+ 29,410	45	7,375,262	6.648,145	+ 727,117	,,	96	83 7/16	99½	4
	Bombay, Baroda & Cl. India	2,986	10.4.41	350,325	+ 51,900	2	350,325	298,425	+ 51,900	,,	108	99	107½	5 5/16
	Madras & Southern Mahratta	2,939	10.2.41	177,450	+ 8,713	47	5,268,599	4,967,838	+ 300,761	,,	104	97 7/16	103½	7½
	Rohilkund & Kumaon	571	31.3.41	70,950	+ 5,404	26	343.151	317,933	+ 25,218	,,	284	238	290	5½
	South Indian	2,500	10.2.41	129,894	+ 17,639	47	3,935,914	3,507,694	+ 428,220	,,	93¾	83	98½	4 7/16
Various	Beira	204	Feb. 1941	71,772	—	22	356,533	—	—	—	—	—	—	—
	Egyptian Delta	623	31.1.41	8,121	+ 1,944	45	203,109	181,744	+ 21,365	Prf. Sh.	7/10½	⅜	7/16	Nil
	Kenya & Uganda	1,625	—	—	—	—	—	—	—	—	—	—	—	—
	Manila	—	—	—	—	—	—	—	—	B. Deb.	53	44½	46½	7⅛
	Midland of W. Australia	277	Dec. 1940	12,239	— 1,195	—	91,124	76,928	+ 14,196	Inc. Deb.	88	80	87½	6⅛
	Nigerian	1,900	25.1.41	55,111	— 18,846	26	1,788,795	1,602,531	+ 186,264	—	—	—	—	—
	Rhodesia	2,442	Feb. 1941	460,055	—	22	2,388,076	—	—	—	—	—	—	—
	South Africa	13,287	22.2.41	695,230	+ 76,688	47	32,675,547	30,392,299	+ 2,283,248	—	—	—	—	—
	Victoria	4,774	Aug. 1940	888,289	+ 190,022	9	1,756,717	1,383,157	+ 373,560	—	—	—	—	—

Note. Yields are based on the approximate current prices and are within a fraction of 1/16 Argentine traffics are given in pesos

† Receipts are calculated @ 1s. 6d. to the rupee